

# Tennessee State Safety Oversight Agency

RAIL TRANSIT STATE SAFETY
PROGRAM STANDARD v3.0

James K. Polk Building, 9th Floor 505 Deaderick Street Nashville, TN 37243



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# **Approvals**

The individuals below, submitting and signing this Rail Transit Safety Oversight Program Standard, verify that it was prepared in accordance with the requirements set forth by the Federal Transit Administration (FTA) in 49 US Code § 5329, Public Transportation Safety Program / Fixing America's Surface Transportation (FAST) Act Sections 3013, 3020, 3021, 3022, and the current implementation rules, 49 CFR Part 674, State Safety Oversight; 49 CFR Part 673, Public Transportation Agency Public Transportation Agency Safety Plan; 49 CFR Part 672, Public Transportation Safety Certification Training Program; 49 CFR Part 670, National Public Transportation Safety Program; and 49 CFR Parts 625 and 630, National Transit Database / Transit Asset Management; that they are authorized representatives of the State of Tennessee Department of Transportation, the designated State Safety Oversight Agency; and that their signatures attest that all items and conditions contained in this Program Standard are understood, accepted, and approved.

Parts 625 and 630, National Transit Database / Transit Asset Managem of the State of Tennessee Department of Transportation, the designatheir signatures attest that all items and conditions contained in this and approved.	ated State Safety Oversight A
APPROVED BY:	
Daniel Pallme Daniel Pallme (Dec 20, 2021 16:51 CST)	Dec 20, 2021
Daniel Pallme, Assistant Chief of Environment and Planning	Date
RECOMMENDED BY:	
Amy Kosanovic (Dec 20, 2021 15:25 CST)	Dec 20, 2021
Amy Kosanovic, Planning Supervisor, Freight and Logistics Division	Date
PREPARED BY:	
Jennifer Coulter	Dec 20, 2021
Jennifer Coulter, State Safety Oversight Program Manager	Date



# **Revisions**

Version #	Date	Revised Section(s)	Purpose	
v 3.0	December 20 <sup>th</sup> , 2021	All	Revised the Program Standard to streamline and clarify 49 CFR Part 673/674 requirements. Added Sections 10, 11, Appendix A, Appendix B, Appendix C, Appendix D	
v 2.5	July 20th, 2020	All	Removed all 49 CFR Part 659 requirements post agency safety plan implementation by rail transit agencies. Updated Accident Supplement (added table).	
v 2.0	May 10th, 2019	All	Incorporated 49 CFR Part 673 requirements for Public Transportation Agency Safety Plan and other revisions for clarification.	
v 1.5	August 17th, 2018	All	Program Standard Revisions base on FTA Transit Safety & Oversight (TSO) Comments	
			Page 23 Revised language	
			Page 56 Deleted language to Correct for Supplement I	
			Page 65 Revised language	
			Revised Table of Contents to Reflect Changes	
v 1.4	July 16th, 2018	All	Program Standard Revision Version 1.4 Post FTA Comments	
			Page 63 Add Enforcement Authority Sequence of Events	
v 1.3	November 30th, 2017	All	Program Standard Revision Version 1.3 Post FTA Comments	
v 1.2	September 30th, 2017	All	Program Standard Revision for Draft Version 1.2	
v 1.1	August 29th, 2017	All	Comments Received from Consultants	
Initial Draft	July 3rd, 2017	All	Baseline Document	



# Introduction

The Tennessee Rail Transit State Safety Standard is for the Tennessee Department of Transportation (TDOT) State Safety Oversight (SSO) Program. The Federal Transit Administration (FTA) requires this program standard which applies to rail properties in the State of Tennessee regulated by the Federal Transit Authority (FTA).

# From System Safety to Safety Management Systems

In 1996, FTA required rail SSO programs in 49 United States Code (U.S.C.) Section 5330, State Safety Oversight. Prior to this, FTA had published their SSO rule in December 1995 as 49 Code of Federal Regulations (CFR) Part 659. In April 2005, FTA published a revised version of 49 CFR Part 659. The State of Tennessee established an SSO program through TDOT for Tennessee's rail transit agencies (RTAs) in 2006. In 2012, as part of Moving Ahead for Progress in the 21st Century Act (MAP-21), Congress set higher expectations and responsibilities for safety oversight and safety performance for transit agencies, states, and FTA in 49 U.S.C. Section 5329. The new expectations and responsibilities required RTAs to move from system safety programs to transit-specific safety management systems (SMS). SMS is formal, top-down, organization-wide approach to managing safety risk and ensuring the effectiveness of an RTA's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards.

A final rule was published by FTA in 2016 based on 49 U.S.C. Section 5329, which further codifies an SSO agency's authority to investigate accidents and oversee rail properties' implementation of its safety program plan and public transportation agency safety plan. The TDOT SSO program received FTA certification of compliance with 49 CFR Part 674 in July 2018. Under the rule, SSO agencies must certify their programs as 49 CFR Part 674 compliant and receive approval from FTA three years from the regulations' effective date.

Furthermore, 49 CFR Part 674 never defined nor required the content of system security and emergency preparedness plans. TDOT SSO considers a security program document the minimum safety standard because of its overlap with the safety program. As such, TDOT SSO requires that RTAs develop a system security and an emergency preparedness plan. TDOT SSO will oversee system security and emergency preparedness plans as they intersect with a rail property's safety program from a risk assessment and management perspective.



# Section 1: Program Management

9 CFR Part 674.27(a)(1) - Program Management Requirements - The State Safety Oversight (SSO) program standard must explain the Authority of the State Safety Oversight Agency (SSOA) to oversee the safety of rail fixed guideway public transportation systems (RFGPTS); the policies that govern the activities of the SSOA; the reporting requirements that govern both the SSOA and the RFGPTS; and the steps the SSOA will take to ensure open, ongoing communication between the SSOA and every RFGPTS within its oversight.

# 1.1. Purpose

TDOT is designated as the Tennessee agency responsible for carrying out the functions of the Federal SSO Program for rail fixed guideway public transportation systems, including Memphis Area Transit Authority (MATA) and Chattanooga Area Regional Transportation Authority (CARTA). The purpose of the Program Standard is to provide standards, procedures, and technical direction to assist RTAs in implementing the TDOT SSO Program and Federal requirements. This Standard will clarify the roles and responsibilities of TDOT and each RTA for implementing Program requirements. This Program Standard also specifies the safety information requirements for ongoing communication between TDOT and the affected RTAs, as well as TDOT's responsibilities and communication with the FTA. Additional supplemental information is provided in appendices referenced throughout this Standard.

# 1.2. Roles and Responsibilities

# 1.2.1. Responsibility of the State

The primary responsibility of the State of Tennessee is designating an entity other than the RTA to oversee the safety of rail fixed guideway systems. Initially, the State of Tennessee established an SSO program through TDOT in 2006. On September 5th, 2013, TDOT was redesignated the SSOA by the Governor, per FTA requirement and Tennessee State law TCA 13-10-101. The TDOT SSO program received FTA certification of compliance with Part 674 in July 2018.

# 1.2.2. Responsibilities of the SSOA

The responsibilities of the SSOA are:

- a. Prepare a Program Standard, which is a written document developed and adopted by the oversight agency that describes the policies, objectives, responsibilities, and procedures used to provide RTA safety oversight. The Program Standard will coordinate with the FTA data collection and information systems established to implement 49 USC Section 5329, including the Authority to:
  - Adopt and use the reporting standards, systems, and forms required by the FTA to record work activities performed under the Program Standard.
  - Establish a program to ensure that accurate, complete, and timely data is collected and reported.
  - Verify submitted data through an audit program.
- b. Protect confidential accident and hazard investigation information from public disclosure as far as it is permitted by law.
- c. Audit, at least once every three years, the implementation of Agency Safety Plans (ASPs) of the RTAs in the State of Tennessee subject to Section 5329(d).



- d. Require, review, approve, oversee, and enforce the implementation of the ASP by each RTA in the State of Tennessee.
- e. Provide at least once annually a status report on the safety of the RTAs within the State of Tennessee to the FTA, the Governor of the State of Tennessee, and the Board of Directors or equivalent entity of any RTAs that TDOT oversees.
- f. Prepare and submit to the FTA, upon request, all reports required in connection with the Program Standard and other conditions of the grant.
- g. Participate in capital projects planning related to rail transit and safety program aspects of the project, including design through safety and security certification and successful transition from the project to revenue operations and maintenance.
- h. Establish and maintain a Technical Training Plan in compliance with § 672.11
- i. Records will be maintained for five (5) years. At the end of the retention period, electronic records will be destroyed by the state-approved method.

# 1.2.3. Responsibilities of the RTA

RTAs under the Authority of the SSO Program must develop and implement an ASP. According to schedules specified in this Standard, these plans and any supporting or referenced procedures must be submitted to TDOT for review and approval. In addition, the RTA's responsibilities include, but are not limited to:

- a. Conduct scheduled reviews to determine if the ASP requires updating and coordinate updates and reviews/approvals with the TDOT SSO.
- b. Perform an internal safety review of ASP implementation over a three-year cycle.
- c. Submit annual reports to the TDOT SSO documenting activity for its internal safety review process, including compliance with the schedule established for the internal audit/ review program, the activities performed, and a listing of findings, corrective actions, recommendations, and status of their implementation.
- d. Submit to the TDOT SSO a certification signed by the RTA's Accountable Executive regarding the agency's compliance with its ASP. If the Accountable Executive cannot submit this certificate, the RTAs must submit to TDOT the steps necessary to achieve compliance with the ASP.
- e. Implement an SMS as required by 49 CFR Part 673, scaled appropriately to the RTA size.
- f. Report any events that meet the criteria and thresholds developed by the FTA and published as a rule (i.e., 49 CFR Part 674 Appendix A), guidance under the National Public Transportation Safety Plan (Part 670), or any other applicable reporting guidelines.
- g. Conduct accident/incident investigations on behalf of TDOT SSO unless otherwise directed.
- h. Prepare corrective action plans (CAPs) and implement the plans to minimize, control, correct, or eliminate conditions that have results from an accident/incident finding from oversight agency, three-year audits, internal reviews, or at the request of TDOT SSO.



i. Designate personnel and contractors who are directly responsible for safety oversight and ensure their compliance with the applicable training requirements in accordance with § 672.13.

# 1.3. Affected RTAs

RTAs affected by the TDOT SSO program include any light, heavy, or rapid rail system, monorail, inclined plane, funicular, trolley, or automated guideway operating within the State's jurisdiction that is not subject to regulation by the Federal Railroad Administration (FRA). The current RTAs subject to the provisions of the TDOT SSO Program are:

Agency	Address	System Description	Operations Date
Memphis Area Transit Authority	547 N Main St, Memphis, TN 38105	MATA, the governing agency for rail transit initiatives in the Memphis metropolitan area, operates a 6.3 mile heritage streetcar transit system over three routes.	1993
Chattanooga Area Regional Transportation Authority	1617 Wilcox Blvd Chattanooga, TN 37406	CARTA operates an incline plane funicular railway to the top of Lookout Mountain over approximately one-mile railway up a maximum grade of 72.7%.	1895

# 1.4. Authorized Representatives and Points of Contact

# 1.4.1. TDOT SSO Representatives and Points of Contact

	SSO Primary Contact				
Name	Title	Phone	Email	Address	
Jennifer Coulter	SSO Program Manager/ SSO Officer	(615) 306- 2273	Jennifer.H.Coulter@tn.gov	Freight & Logistics Division James K. Polk Building, 9th FL 505 Deaderick Street Nashville, TN 37243	

	SSO Secondary Contact					
Name	Title	Phone	Email	Address		
Amy Kosanovic	Planning Supervisor	(615) 878- 5910	Amy.Kosanovic@TN.gov	Freight & Logistics Division James K. Polk Building, 9th FL 505 Deaderick Street Nashville, TN 37243		



# 1.4.2. RTA Representatives and Points of Contact

RTA	Primary Contact
Memphis Area Transit Authority	Ron Nickle
	Chief Safety and Security Officer
	1370 Levee Road
	Memphis, TN 38108
	Office: (901)722-7119
	rnickle@matatransit.com
Chattanooga Area Regional	Cyndi Bonds
Transportation Authority	Director of Safety & Security
	1617 Wilcox Boulevard
	Chattanooga, TN 37406
	Office: (423) 629-1411 x126
	cyndibonds@gocarta.org

# 1.5. SSOA Authority

- 1.5.1. The State of Tennessee, TDOT, and SSOA (the Authority) are committed to achieving compliance with the statutory requirements specified in the following laws, rules, and regulations, which delegate and guide SSOA authority.
- 1.5.2. Federal Laws, Rules, and Regulations
  - 49 US Code § 5329, Public Transportation Safety Program / Fixing America's Surface Transportation (FAST) Act
  - 49 CFR Part 674, State Safety Oversight
  - 49 CFR Part 673, Public Transportation Agency Safety Plan
  - 49 CFR Part 672, Public Transportation Safety Certification Training Program
  - 49 CFR Part 670, National Public Transportation Safety Program
  - 49 CFR Part 630, National Transit Database
  - 49 CFR Part 625, Transit Asset Management

### 1.5.3. Tennessee State Laws

- Tennessee Code Annotated— Title 13, Chapter 10, Part 2, Section 13-10-202, Financial and legal independence
- Tennessee Code Annotated
   Title 13 Public Planning and Housing,

   Chapter 10 Mass Transit Part 2 State Safety Oversight Program, § 13-10-203
- Tennessee Code Annotated Title 13, Chapter 10, Part 2, Section 13-10-204, Confidentiality of Information

# 1.5.4. TDOT has the authority to:

- a. Require TDOT access to the rail fixed guideway system surveillance capability.
- b. Require, for all State employees and other individuals who work on the Program Standard, and auditing of the same, specific capabilities,



qualifications, and certification (or in the process of certification) through the FTA public transportation safety certification training program.

- c. Require, for personnel supporting the safety function at the RTAS, specific resources, training, and qualifications and reporting relationships with executive leadership.
- d. Require a program of internal audits, inspections, reviews, and certification at each RTA within the State of Tennessee regarding the implementation of the agency's ASP and relevant sub-plans procedures and the verification of corrective action implementation.
- e. Address each RTA's Accountable Executive and board of directors to review safety performance and the implementation and functioning of safety and security risk management and safety and security assurance processes.
- f. Certify the safety of the RTAs and its components, including extensions, modifications, rehabilitations, replacements, and upgrades for passenger operations.
- g. Require the notification, reporting, investigation, and resolution through corrective action of accidents, incidents, hazards, threats, and conditions of concern by the RTA's agency.
- h. Conduct, and require to be conducted on the State's behalf, investigations into any incidents, circumstances, or concerns affecting the safety and security of the RTAs.
- i. At reasonable times, and in a reasonable manner, enter and inspect rail transit property, equipment, infrastructure, facilities, vehicles, operations, and maintenance activities following all safety and security rules and requirements established by the RTAs.
- j. Issue emergency orders regarding the immediate resolution of serious safety and security deficiencies up to and including system shutdown.
- k. Receive and investigate complaints regarding the compliance of each RTA in the State of Tennessee.
- I. Access to property, vehicles, accident scenes, and records of each RTA.
- m. Establish higher Standards than required by § 674
- 1.5.5. Resolution of identified RTA deficiencies will rely on timely implementation of comprehensive agency CAPs agreed to by both the SSO and RTA. In the event of non-responsiveness, the escalation procedure described in Section 3.3.2 will be applied.
- 1.5.6. While TDOT has the authority require the above actions, TDOT may elect to not enforce actions when not required by Federal, State, or local laws.

# 1.6. Policies That Govern SSOA Activities

# 1.6.1. Organization

The TDOT SSO program is administered through the Freight & Logistics Division. The Planning Supervisor, who reports to the Director, is authorized to dedicate resources to perform safety oversight activities, including personnel and technical contractor support. TDOT SSO retains authority to use contractors as required to support the performance of safety or security oversight activities. The Planning Supervisor is also authorized to require, review, approve, monitor, and verify the implementation of CAPs. The Planning Supervisor is supported



by the SSO Program Manager, who serves as the official point of contact for the RTAs on all matters of the SSO Program, the Program Standard, and related federal safety rules and is responsible for day-to-day oversight and communication. Organization charts for TDOT are provided in **Appendix A** *TDOT Organizational Charts*.

# 1.6.2. Confidentiality of Information

Data collected for and reports concerning investigations conducted by the RTA, or a contractor acting on behalf of the RTA, shall be confidential and not open for inspection by members of the public pursuant to Tennessee Code Annotated, Title 13 – Public Planning and Housing and may not be admitted into evidence or used in a civil action for damages resulting from a matter mentioned in such a report. Any portion of an RTA's documentation that concerns security for the system shall be confidential and not open for inspection by members of the public pursuant to the open records law. This protection aims to allow open discussions and analyses of the RTA's safety-related risk and performance.

# 1.6.3. Conflict of Interest (COI)

Potential COI situations are required to be identified, disclosed, assessed, and resolved for the TDOT SSO program. For any situation that might arise as a potential COI, the TDOT SSO Program Manager must assess and determine if the COI poses an actual conflict of interest violation of the SSO regulation (49 CFR Part 674). This assessment and determination may require discussions with other staff, TDOT Legal, and/or TDOT management. Ultimately, a formal communication (i.e. letter, email) is received for each COI assessment to occur that describes the potential COI situation from either an external organization or TDOT. Then the assessment and resolution process begins internally to determine either complete COI resolution or necessary next steps. TDOT then issues a letter with assessment and resolution and a subsequent step concurrence or non-concurrence letter to the external organization or within TDOT on the COI situation. If the following steps are taken, another COI Review and Assessment communication (i.e. letter, email) will be generated and used for the assessment and resolution process documentation. As a part of this COI assessment process, each potential COI situation communication and COI Review and Assessment communication becomes a record and will be retained on file as part of the TDOT SSO program.

# 1.6.4. Risk Monitoring

The TDOT SSO Program conducts risk monitoring activities per the SMS, as described in the National Public Transportation Safety Plan. These risk monitoring activities are shown in **Appendix B TDOT Risk Monitoring Activities** and are designed to ensure active involvement of all parties in the TDOT SSO program and monitoring of all safety-related activities identified at the RTA. In addition, the TDOT SSO program tracks all relevant communications, reports, investigations, audits, safety reviews, and submissions made by each RTA, as well as programmatic record keeping.

### 1.6.5. SSOA and RTA Safety Certification Training

At a minimum, TDOT SSO, RTA employees, and contractors who conduct safety audit examinations with direct safety oversight responsibilities are required to achieve (within three years) the Transit Safety and Security Program (TSSP) Certificate from the Transportation Safety Institute (TSI). Thereafter, refresher training shall be completed every two years.

## 1.6.6. SSOA Contractor Selection

The TDOT SSO must consider COI and properly vet contractor proposals for SSOA oversight assistance. Contractors must not currently or within the past 36 months have rendered service to the same RTA where oversight will apply.



# 1.6.7. Federal Funding

TDOT receives Federal financial assistance, subject to uniform administrative requirements for grants and cooperative agreements to State and local governments. Under the Office of Management and Budget's Uniform Administrative Requirements (commonly referred to as the "Super Circular"), as determined applicable by the FTA, is responsible for the non-Government share of the cost of the Program Standard that meets the requirements of 49 USC 5329 (e)(6)(C)(iii). TDOT SSO Program can allocate adequate funds for the administration of the Program Standard, including the enforcement of federal rules or regulations or compatible State laws or regulations. TDOT does not directly provide funding and/or public transportation services in an area with an RTA subject to these requirements.

# 1.6.8. SSOA and RTA Communications

- 1.6.8.1. The SSOA will maintain ongoing communications with the RTA regarding safety-related aspects of the RTA. To facilitate communications, the SSOA will attend monthly meetings to discuss the status of accident/incident/event investigations, open CAPs, identified unacceptable hazards, and other safety-related topics.
- 1.6.8.2. The SSOA will participate in safety-related training and events. In addition, the SSOA will conduct on-site inspections.
  - 1.6.8.2.1. The inspections may include, but are not limited to, reviewing and approving accident investigation procedures and reports; reviewing monthly construction reports, as appropriate; and collecting and reviewing other data as leading indicators of safety-related events to identify mitigation measures.
  - 1.6.8.2.2.Any requests made by the SSO Officer to the RTA, either by phone call or email, shall be returned via email within a five-day period unless otherwise noted in the request.
- 1.6.8.3. Federal Law mandates that RTAs relay communications with federal agencies such as FTA, National Transportation Safety Board (NTSB), FRA, or the Transportation Security Administration (TSA) regarding their safety program. The TDOT SSO program will also provide any RTA-desired support, input, or review of the RTAs' responses to these federal agencies. At a minimum, a courtesy copy of the correspondence and attachments is required. The TDOT SSO program also intends to share with the affected RTA any contact received from or responses required to federal agencies that include or directly affect the RTAs in the state, such as contact by FTA investigators or TSA Surface Transportation Security Inspectors.

# 1.6.9. Safety Standards

- 1.6.9.1. The TDOT SSO program requires reasonable direct access to the RTA's safety standard documents, any changes to the document, or new standards developed by the RTA. Each of these documents has its own process for update based on requirements or experience.
- 1.6.9.2. Changes to the minimum standards for safety at each of the RTAs will be based on the RTAs' experience, investigations, audits, industry best practices, and Federal guidelines. These new or updated minimum standards for safety will be mutually agreed to with the TDOT SSO program through discussions or based on corrective actions defined by the RTA and approved by the TDOT SSO program.



# Section 2: Program Standard Development

49 CFR Part 674.27(a)(2) – Program Standard Requirements – The SSO Program Standard must explain the SSOA's process for developing, reviewing, adopting, and revising its minimum standards for safety and distributing those standards to the RFGPTS.

# 2.1. Purpose

This section includes an explanation of TDOT's processes for developing, reviewing, adopting, and revising minimum standards for safety and distributing those standards to the affected RTAs. These processes will provide reasonable opportunities for open and transparent communication with RTAs, expecting that each RTA shall fully implement the TDOT Program Standard in compliance with federal and state law.

# 2.2. Development

- 2.2.1. This Program Standard was developed in compliance with:
  - 49 U.S. Code § 5329, Public Transportation Safety Program / FAST Act
  - 49 CFR Part 674, State Safety Oversight
  - 49 CFR Part 673, Public Transportation Agency Safety Plan, Proposed Rule
  - 49 CFR Part 672, Public Transportation Safety Certification Training Program
  - 49 CFR Part 670, National Public Transportation Safety Program
  - 49 CFR Part 625, Transit Asset Management
  - 49 CFR Part 630, National Transit Database
  - State of Tennessee, Tennessee Code Annotated, Title 13 Public Planning and Housing
- 2.2.2. The SSOA may require additional safety standards based on observations from investigations, audits, inspections, industry standards, federal and state laws, or updates to practices and procedures. Affected RTAs are to adhere to those additional safety standards.

# 2.3. Review and Revision

At a minimum, the Program Standard will be reviewed annually to determine if any revisions are necessary. This annual revision schedule may change depending on the scheduling of other SSO program activities, such as FTA SSO audits, three-year audits of the RTA, or significant events. The review schedule is as follows:

- a. By **October 1**st, the annual review and identification of proposed revisions (if any) to the Program Standard will be completed by TDOT. At this time, TDOT will circulate the revised/draft Program Standard to the affected RTAs and FTA for review and comment.
- b. By **November 1** $^{\rm st}$ , a 30-day review and comment period for the revised/draft Program Standard will be completed by the affected RTAs and FTA.
- c. By **January 31**<sup>st</sup>, a 90-day review and update period for the revised/final Program Standard will be completed by TDOT. At this time, TDOT will adopt and distribute the final version of the Program Standard to the affected RTAs' designated point of contact.
- d. By **March 15**<sup>th</sup>, the Program Standard is submitted to the FTA as a part of TDOT's annual reporting.



# 2.4. Approval

The Assistant Bureau Chief of Environment and Planning will give final approval of all revisions to the Program Standard, on recommendation by the Planning Supervisor of the Freight & Logistics Division.

# 2.5. Distribution

2.5.1. The Program Standard is distributed by the TDOT SSO Program Manager to various internal and external SSO program stakeholders. The Program Standard may also be requested directly from the TDOT SSO Program Manager at:

Tennessee Department of Transportation
Freight & Logistics Division
James K. Polk Building, 9th Floor
505 Deaderick Street,
Nashville, TN 37243

2.5.2. Copies of the approved Program Standard are distributed directly to the FTA and designated safety and security points of contact established by the RTA. **Appendix C Program Standard Acknowledgement of Receipt** includes a copy of the Program Standard Acknowledgement of Receipt that documents the review, understanding, and agreement to comply with the requirements of the Program Standard on behalf of the RTA.



# Section 3: Program Policy and Objectives

49 CFR Part 674.27(a)(3) Program policy and objectives The SSO Program Standard must set an explicit policy and objectives for safety in rail fixed guideway public transportation systems throughout the State.

# 3.1. SSOA Program Policy

- 3.1.1. TDOT's mission is to provide a safe and reliable transportation system that supports economic growth and quality of life.
- 3.1.2. TDOT provides oversight and technical assistance to the RTA. TDOT also evaluates the effectiveness of and enforces the RTA's Agency Safety Plan (ASP). Through participation in safety meetings, reviewing investigations of accidents/incidents/events, the SSOA will provide guidance and input to the RTA safety implementation program, which is wholly owned by and implemented by the RTA.

# 3.2. SSOA Program Objective/ Expectations

- 3.2.1. TDOT SSOA program objectives and expectations include the following:
  - a. Takes responsibility for this State's safety program authority and requirements from the Federal and State governments
  - b. Assures qualifications and training for SSO program-related staff for the performance of SSO related duties
  - c. Provides the State's RTAs with transparency and flexibility in safety oversight program execution
  - d. Drives productive partnership with the RTAs in support of each agency's safety program, which includes oversight and technical assistance for maintaining and improving safety performance at the RTAs for employees and patrons alike
  - e. Expects and requires that the RTA Safety representatives and staff be competent in executing the TDOT SSO program's requirements and safety program. In addition, TDOT expects and requires that the RTA executives and rail-related management be responsive and committed to the RTA safety program and to fulfilling the TDOT SSO program requirements, in accordance with State and Federal law and the Program Standard, as well as the RTA minimum safety standards
  - f. Commits to support safety program-related investigations and internal reviews/audits at the RTAs. The expectation is that the RTAs are responsible for leading these investigations and internal audits/reviews. The TDOT SSO program may, at its discretion, participate in these safety program-related activities, including the conduct of independent or cooperative on-site investigations/audits
  - g. Commits to the RTAs owning their safety-related risk, not the State. The SSO program staff will technically review safety-related investigations, internal reviews/audits, and complete independent investigations/audits, such as the triennial audit. TDOT may also make recommendations and provide input and technical assistance as needed or requested. However, the RTAs will develop and own their corrective actions and coordinate with the SSOA to approve those corrective actions when they are deemed appropriate and complete with respect to the findings of the investigations and reviews/audits
  - h. Commits to provide periodic and three-year audits as required and determined necessary by the TDOT SSO program and to assure that the SSO is appropriately aware of the safety risk environment at each RTA



i. Commits to providing annual and periodic information and data to the FTA SSO program, as required and appropriate

# 3.3. Risk Monitoring and Escalation

- 3.3.1. TDOT SSO program tracks all relevant communications, reports, investigations, audits, and submissions made by each RTA to ensure the RTAs comply with TDOT's mission, policy, and objectives, as well as all Federal and State laws. See Appendix B for TDOT Risk Monitoring Activities.
- 3.3.2. When an RTA is found to be non-compliant and non-responsive in any requests made by TDOT SSOA, these requests may need to be escalated to ensure appropriate actions are taken.

# 3.3.2.1. Initial actions

Once the SSOA identifies a potentially significant hazardous condition, this situation is discussed directly with RTA staff and management. These risk-related issues are typically and almost always resolved at this level of discussion and interaction. The SSOA documents these observations, inspections, interviews, and planned resolutions and will continue to monitor for resolution to ensure that the risk issues are adequately resolved in a timely manner.

# 3.3.2.2. First level of escalation

After the predetermined time identified in the initial action, if the SSOA continues to observe a pattern of potentially significant risk issues already communicated to the RTA, further communication will be made with the RTA. Typically, this is performed through a formal letter from the TDOT SSOA to the RTA Chief or Director of Safety and Security. This letter will provide the risk issues that were of concern to the SSOA accompanied by a formal request to respond to the letter, including an explanation of how the RTA plans to address the identified concerns from the SSOA. If the explanations from the RTA are reasonable/acceptable, the issues and responses are documented, and risk monitoring continues. If the RTA determines that the identified risk issues need more attention, the TDOT SSOA requires the RTA to develop appropriate corrective actions that are agreed to and then tracked to completion.

### 3.3.2.3. Second level of escalation.

If the RTA does not comply with the direction provided in the first level of escalation, a formal letter will be sent from TDOT's Assistant Bureau Chief of Environment & Planning to the RTA Accountable Executive. The letter will describe the risk concerns and require the RTA Accountable Executive to formally respond with a letter that explains how the RTA plans to address the identified risk concerns. If the explanations from the RTA are acceptable and an acceptable timetable established, the concerns and responses are documented, and the SSOA will continue risk monitoring. If the SSOA determines that the identified risk concern needs additional attention, the SSOA will require the RTA to develop an appropriate corrective action plan.

# 3.3.2.4. Third level of escalation

3.3.2.4.1. If at any time during the second level of escalation, the identified risk concerns cannot be resolved due to a lack of communication or responsiveness from the RTA, the SSOA may wholly suspend the operation of the RTA or withhold transit funds from the RTA until the situation is corrected.



- 3.3.2.4.2. In order to enact a suspension, a formal written recommendation will be sent to the Commissioner of TDOT through the Bureau Chief of Environment & Planning requesting suspension of operation of the RTA. The recommendation will include a timeline and details of non-compliance during the first, second, and levels of escalation. The Commissioner and Bureau Chief can approve the suspension or request a formal meeting with the RTA Accountable Executive to attempt to resolve the identified risk concerns before suspension.
- 3.3.2.4.3. Concurrently while recommending suspension, the SSOA will alert the RTA's Accountable Executive and RTA Chief or Director of Safety and Security that they are recommending suspension to the Commissioner, due to non-compliance and non-responsiveness.



# Section 4: Agency Safety Plans and Internal Safety Reviews

49 CFR Part 674.27(4) - Oversight of Rail Public Transportation Agency Safety Plans Requirements

The SSO program standard must explain the role of the SSOA in overseeing an RTA's execution of its Public Transportation Agency Safety Plan and any related safety reviews of the RTA's fixed guideway public transportation system. The program standard must describe the process whereby the SSOA will receive and evaluate all material submitted under the signature of an RTA's accountable executive.

49 CFR Part 674.29 - Public Transportation Agency Safety Plans: General Requirements

- (a) In determining whether to approve a Public Transportation Agency Safety Plan for a rail fixed guideway public transportation system, an SSOA must evaluate whether the Public Transportation Agency Safety Plan is consistent with the regulations implementing such Plans; is consistent with the National Public Transportation Safety Plan; and is in compliance with the program standard set by the SSOA.
- (b) In determining whether a Public Transportation Agency Safety Plan is compliant with 49 CFR Part 673, an SSOA must determine, specifically, whether the Public Transportation Agency Safety Plan is approved by the RTA's board of directors or equivalent entity; sets forth a sufficiently explicit process for safety risk management, with adequate means of risk mitigation for the rail fixed guideway public transportation system; includes a process and timeline for annually reviewing and updating the safety plan; includes a comprehensive staff training program for the operations personnel directly responsible for the safety of the RTA; identifies an adequately trained safety officer who reports directly to the general manager, president, or equivalent officer of the RTA; includes adequate methods to support the execution of the Public Transportation Agency Safety Plan by all employees, agents, and contractors for the rail fixed guideway public transportation system; and sufficiently addresses other requirements under the regulations at 49 CFR Part 673.
- (c) In an instance in which an SSOA does not approve a Public Transportation Agency Safety Plan, the SSOA must provide a written explanation, and allow the RTA an opportunity to modify and resubmit its Public Transportation Agency Safety Plan for the SSOA's approval

49 CFR Part 674.27(4) – Oversight Rail Transit Agencies' Internal Safety Review

The SSO program standard must explain the role of the SSOA in overseeing an RTA's execution of its Public Transportation Agency Safety Plan and any internal safety reviews of the RFGPTS. The program standard must describe the process whereby the SSOA will receive and evaluate all material submitted under the signature of an RTA's accountable executive. Also, the program standard must establish a procedure whereby an RTA will notify the SSOA before the RTA conducts an internal review of any aspect of the safety of its RFGPTS.

# 4.1. Purpose

This section of the Program Standard identifies the minimum requirements for the ASP review to be developed, approved, adopted, and implemented by the RTA prior to, and following, the start of revenue operations for new start, system modification, or extensions. This section also includes the minimum requirements to develop and implement a process for ongoing internal safety reviews (ISRs).

# 4.2. ASP General Requirements

- 4.2.1. The ASP must comply with 49 CFR Part 673.11 General Requirements, which include the following elements (see **Appendix D ASP Checklist**, for a complete list of ASP requirements):
  - a. The initial and subsequent updates must be signed by the Accountable Executive and approved by the agency's Board of Directors or an Equivalent Authority.



- b. Must document the processes and activities related to SMS implementation, as required under Subpart C of § 673.
- c. Must include performance targets based on the safety performance measures established under the National Public Transportation Safety Plan. **NOTE:** the RTA must coordinate with their MPO and State to communicate their safety performance measures.
- d. Must address all applicable requirements and standards as set forth in FTA's Public Transportation Safety Program, the National Public Transportation Safety Plan, and this Standard.
- e. Each transit agency must establish a process and timeline for conducting an annual review and update of the ASP.
- f. Must include or incorporate by reference in an emergency preparedness and response plan or procedures that address, at a minimum, the assignment of employee responsibilities during an emergency, and coordination with Federal, State, regional, and local officials with roles and responsibilities for emergency preparedness and response in the RTA's service area.
- g. Must include or incorporate by reference a description of the safety certification process required by the RTA to ensure that safety concerns and hazards are adequately addressed prior to the initiation of passenger operations and for New Starts and subsequent major projects to extend, rehabilitate, modify an existing system, or to replace vehicles and equipment. 4.2.1.1. SMS

Each transit agency must establish and implement an SMS as required by 49 CFR Part 673. A transit agency SMS must be appropriately scaled to the size, scope, and complexity of the transit agency and include the following elements:

- Safety Management Policy as described in § 673.23
- Safety Risk Management as described in § 673.25
- Safety Assurance as described in § 673.27
- Safety Promotion as described in § 673.29

# 4.3. ASP Review

- 4.3.1. TDOT will review and evaluate each ASP for compliance with 49 CFR Part 673, the TDOT Program Standard, and the National Public Transportation Safety Plan. At the time the ASP is submitted for initial approval and subsequent updates, the RTA is required to submit via email:
  - Referenced materials and supporting procedures to document each required element that is addressed. Examples of referenced materials and supporting procedures include, but are not limited to: standard operating procedures, training plans, rule books and bulletins, hazard/risk management plans, maintenance rules and procedures, emergency response plans and agreements, security plan, and compliance programs.
  - A completed **Appendix D** ASP Checklist
  - A document identifying all the changes made to the plan since it was last approved by TDOT
  - 4.3.1.1. On-site meetings and video conferences may be conducted to address issues identified during the review of the ASP.



- 4.3.2. **Annually**, each RTA shall begin a review of its ASP and notify TDOT SSO via email if the ASP is current or requires an update. The purpose of the review is for RTAs to assess whether the plans are current, accurate, and effective in improving safety performance.
- 4.3.3. If the RTA determines that its ASP must be updated, the notification shall summarize the areas requiring an update and the date the revised ASP will be submitted to the TDOT SSO.
- 4.3.4. The revised ASP must be submitted to TDOT SSO no later than **February 1<sup>st</sup>**.
  4.3.4.1. If the RTA conducts its annual ASP review and determines that an update is not necessary for the year, it must prepare and submit by **January 1<sup>st</sup>** formal correspondence notifying the TDOT SSO of this determination. If the TDOT SSO wishes to object to this determination, the TDOT SSO will notify the RTA within **30 days**.
- 4.3.5. ASP Annual Review Sequence:
  - 1. TDOT will acknowledge receipt of an ASP submission within 10 days.
  - 2. TDOT will complete the ASP review and provide review comments, including areas requiring revisions, to the RTA within **30 days** of ASP receipt.
  - 3. TDOT and the RTA will reach a mutually agreeable date for the resubmission of ASPs that require revisions. Upon receipt of the requested revision, the process will continue.
  - 4. Upon approval, TDOT will send an approval letter via email to the Accountable Executive and the RTA Safety point of contact.
- 4.3.6. ASP Initial Submittals for New Start Projects
  - 4.3.6.1. Each new RTA entering the SSO program shall make an initial written submission of their ASP and all referenced materials and supporting procedures a minimum of **180 days** prior to the target date of pre-revenue operations.
    - 4.3.6.1.1. While conducting its review, TDOT may request additional information, clarifications, or revisions to the ASP and referenced materials and supporting procedures.
  - 4.3.6.2. Initial ASP approval may take longer than the annual review sequence. Timelines will be communicated after the initial submittal.
  - 4.3.6.3. On-site meetings and video conferences may be conducted to address any issues identified during the review of the ASP.
  - 4.3.6.4. TDOT will issue a formal letter of approval to the Accountable Executive and the RTA Safety point of contact upon approval of the initial ASP submission.
- 4.3.7. ASP Updates for RTA Extensions and System Modifications
  - 4.3.7.1. The RTA must ensure safety concerns and impacts are addressed in modifications to existing systems, vehicles, equipment, or system extensions. The RTA shall submit the updated ASP and all referenced materials and supporting procedures a minimum of **180 days** prior to the target date of pre-revenue operations or system modification.
    - 4.3.7.1.1. While conducting its review, TDOT may request additional information, clarifications, or revisions to the ASP and referenced materials and supporting procedures. TDOT may conduct on-site reviews prior to the approval of the updated ASP.
  - 4.3.7.2. ASP approval for RTA extensions and system modifications may take longer than the annual review sequence. Timelines will be communicated after ASP submittal.
  - 4.3.7.3. TDOT will issue a formal letter via email of approval to the Accountable Executive and the RTA Safety point of contact upon approval of the updated ASP.



# 4.4. RTA Internal Safety Reviews (ISR)

- 4.4.1. RTAs must develop and document a process for the performance of ISRs that assesses the elements and implementation of the ASP to ensure that the agency has an inclusive and effective process for continuous improvement and direct resources to manage safety optimally. Each ASP component must be reviewed at least once during a three-year cycle.
  - 4.4.1.1. The ISR process, at a minimum must contain:
    - a. Description of a process used by the RTA to determine if all identified elements of the ASP are performing as intended.
    - b. Determination if areas of non-compliance and hazards are being identified in a timely manner.
    - c. Description of a process to ensure that all components are being reviewed in an on-going manner and over a three-year cycle.
    - d. Ensure that no reviewer leads an internal review of the department in which there is a COI.

### 4.4.2. Notification Process

- 4.4.2.1. RTAs must notify TDOT SSO at least **30 days** before an ISR is scheduled to begin.
- 4.4.2.2. This notification must include:
  - a. ISR date
  - b. ISR scope
  - c. ISR checklists
  - d. Names of interviewees
  - e. Names of reviewers
  - f. ISR procedures
- 4.4.2.3. TDOT will review and provide comments to the RTA within 10 days.
- 4.4.2.4. Once approved, TDOT SSO will issue a letter of concurrence via email to the RTA that the audit scope and checklists are consistent with an RTA's three-year audit schedule to the Chief Safety Officer or RTA safety point of contact.
  - 4.4.2.4.1. At the discretion of TDOT or contractors, the SSOA or contractors may observe the on-site portion of the RTA reviews.

# 4.5. Reporting Requirements

- 4.5.1. RTAs must submit the ISR report to TDOT within **60 days** of RTAs must submit the ISR report to TDOT within **60 days** of conclusion of ISR activities. Examples of ISR activities may be, but are not limited to, field observations, supplemental interviews, and document reviews.
  - 4.5.1.1. The following items must be in the ISR Report:
    - a. A listing of the safety components reviewed.
    - b. Identification of the departments, functions reviewed, auditor reviewer for each department.
    - c. Identified findings, associated corrective actions, and recommendations for improvement.
- 4.5.2. RTAs must submit the ISR annual report of ISR completed the previous year no later than **February 1**<sup>st</sup>.
- 4.5.2.1. The following two items to be submitted by the above-referenced deadline:
  - 1. The ISR annual report must contain the following content, see Section 9 Reporting Requirements for a complete list of RTA annual reporting requirements:
    - i. A listing of the safety components reviewed during the calendar year.



- ii. Identification of the departments and functions reviewed.
- iii. An update of the RTA's three-year schedule ISR schedule.
- iv. Findings of non-compliance.
- 2. A formal letter signed by the RTA's Accountable Executive, that:
  - i. Certifies the RTA is in compliance with its agency safety plan, or
  - ii. States the RTA, as indicated through the ISR final report, is not in compliance with its agency safety plan. If the RTA cannot certify compliance, then this letter must specify each non-compliance issue, the RTA's activities to achieve compliance, the date that those activities will be completed, and the projected date that compliance will be achieved.



# Section 5: SSO Safety Audits

49 CFR Part 674.27(5) - Triennial SSO agency audits of Rail Public Transportation Agency Safety Plans - The SSO program standard must explain the process the SSOA will follow and the criteria the SSOA will apply in conducting a complete audit of the RTA's compliance with its Public Transportation Agency Safety Plan at least once every three years, in accordance with 49 U.S.C. 5329. Alternatively, the SSOA and RTA may agree that the SSOA will conduct its audit on an on-going basis over the three-year timeframe. The program standard must establish a procedure the SSOA and RTA will follow to manage findings and recommendations arising from the triennial audit.

49 CFR Part 674.31 - Triennial Audits: General Requirements - At least once every three years, an SSOA must conduct a complete audit of an RTA's compliance with its Public Transportation Agency Safety Plan. Alternatively, an SSOA may conduct the audit on an on-going basis over the three-year timeframe. At the conclusion of the three-year audit cycle, the SSOA shall issue a report with findings and recommendations arising from the audit, which must include, at minimum, an analysis of the effectiveness of the Public Transportation Agency Safety Plan, recommendations for improvements, and a corrective action plan, if necessary or appropriate. The RTA must be given an opportunity to comment on the findings and recommendations.

# 5.1. Purpose

This section addresses TDOT SSO's procedure and schedule for conducting audits performed on-site or virtually of the RTA. This section also includes the schedule for the FTA audit of the TDOT SSO program. Included are other audits, reviews, inspections of issues related to safety oversight of the RTA.

# 5.2. SSOA Triennial Audit Schedule

5.2.1. At least once every three years, TDOT will conduct an audit to determine the extent to which the RTA meets the requirements of its ASP, the effectiveness of these plans, and whether the plans and subordinate procedures should be updated.

Agency Audited	Program Audited	Next Audit Date*	Auditor
TDOT	State Safety Oversight	2022	FTA
Memphis Area Transit Authority	Rail Safety	2024	TDOT
Chattanooga Area Regional Transportation Authority	Rail Safety	2024	TDOT

Table 5.1 Projected Triennial Audit Schedule

# 5.3. Triennial Audit Process and Procedures

5.3.1. TDOT SSO will establish an audit team and prepare a schedule, procedures, and approach to guide the audit process. Criteria will be established through which the TDOT SSO can evaluate the RTA's implementation of its ASP. At the conclusion of the audit, TDOT SSO will prepare and issue a report containing evaluation assessment results from the audit, which will analyze the effectiveness of the ASP and whether the plans should be updated.



- 5.3.2. The key tasks for the three-year audit are as follows:
  - a. TDOT will notify the RTA via letter when the on-site or virtual audit is scheduled.
  - b. TDOT will transmit a formal notification and agenda to the RTA.
  - c. TDOT will confirm the detailed logistics (e.g., meeting rooms, participant names, and titles, etc.) no less than **30 days** prior to the audit.
  - d. TDOT will conduct the audit following the agenda transmitted to the RTA.
  - e. TDOT will prepare and submit a Draft Report to the RTA after the conclusion of the audit.
  - f. The RTA will review and respond to the Draft Report and prepare any corrective action plans (CAPs) required by TDOT SSO.
  - g. TDOT will respond to the RTA's comments and make necessary revisions and issue a Final Report.
  - h. TDOT will transmit the completed Three-Year Audit Final Report to the FTA as part of its annual submission.

# 5.3.3. Pre-Audit Preparations

- 5.3.3.1. The TDOT SSO point-of-contact will establish a schedule for conducting the audit at the RTAs. This schedule will include milestones for:
  - a. The development of an approach to guide the audit.
  - b. Notification to the RTA.
  - c. Conducting the audit.
  - d. Preparation of a draft report.
  - e. Delivery of the draft report to the RTA for review and comment.
  - f. Issuance of a final report; and the receipt, review, approval, and tracking through implementation of the RTA's CAPs, if required.
- 5.3.3.2. Based on the milestone schedule, the TDOT SSO point-of-contact will assign a team to conduct the audit. Each team will have a designated Lead Auditor and supporting Team Members.
- 5.3.3.3. Once assigned, the team will begin its work by reviewing the RTA's ASP, referenced materials, and supporting procedures. These materials will form the basis of TDOT SSO's audit approach. As necessary, the TDOT SSO point-of-contact may contact the RTA's safety point-of-contact and request additional information, procedures, or documentation. These requests may be transmitted via email or secure file sharing and storage system.
- 5.3.3.4. Utilizing these materials, the team will develop its audit approach, including:
  - a. The safety requirements to be audited.
  - b. The applicable reference documents that establish the acceptance criteria for those requirements.
  - c. The method of verification.
- 5.3.3.5. TDOT SSO will formally notify the RTA's safety point-of-contact of the upcoming audit within the timeframe specified by TDOT before the audit is scheduled. This notification will occur via email or secure file sharing and storage system.



5.3.3.6. Shortly after notification (or as a component of the notification), TDOT SSO will transmit the agenda prior to the start date of the audit.

### 5.3.4. Audit Procedure

- 5.3.4.1. The audit is intended to be an open and collaborative process with the RTA with the primary goal of improving safety procedures documentation and implementation at the RTA. The audit procedure is conducted as follows:
  - a. Conduct an entrance meeting with the RTA Accountable Executive, Operations Management, Chief Safety Officer, and Rail Safety employees.
  - b. Conduct interviews with appropriate RTA employees and contractors.
  - c. Evaluate documents and data maintained on-site if audit is conducted on-site.
  - d. Observe on-site operations of the RTA if audit is conducted on-site.
    - i. Take measurements and conduct spot checks as appropriate.
  - e. Conduct a debriefing with RTA management at the conclusion of the audit to provide an overview of initial findings and observations.

# 5.3.4.2. Evaluation Criteria

- 5.3.4.2.1. TDOT will assess each audit element according to the following evaluation criteria:
  - 1. *Deficiency:* A deficiency finding refers to an instance where the RTA is not operating in compliance or accordance with an applicable internal or external written requirement, including, but not limited to, this Standard, the RTA's ASP, and all referenced plans, policies, and procedures. Deficiencies may be safety-critical in nature; however, some findings may be related to a deficiency in the content or material reviewed. Depending on the severity of the deficiency, the RTA may be required to develop immediate or emergency corrective actions.
  - 2. Area of Concern: An area of concern finding refers to a condition whereby the RTA may technically be in compliance with applicable internal and external requirements; however, there may be no appropriate written plan, policy, or procedure in place, or the existing plan, policy, or procedure is not appropriate, or is not written in accordance with applicable industry practices or adopted standards. Alternatively, such a finding may constitute a resource or organizational issue preventing the allocation of sufficient resources to system safety activities. Depending on the area of concern, TDOT may make recommendations to the RTA to improve compliance in the area of concern.
  - 3. Observation: Where applicable, TDOT may also provide remarks based on the professional judgment of the review team and its knowledge of industry best practices. These noteworthy observations may highlight areas in which the RTA maintains an exemplary policy, practice, or procedure. The observation may also describe opportunities for potential improvements. TDOT does not require the RTA to develop a formal, written CAP to address each observation. The decision to formulate CAPs or to otherwise respond to the comments and notes contained in observations rests entirely with the RTA.



# 5.3.5. Draft and Final Reports

- 5.3.5.1. Following the completion of the on-site or virtual audit, the TDOT SSO team will prepare a draft report. This draft report will provide:
  - a. Verification that the ASP is an integral parts of the RTA's overall management, engineering, operating, and maintenance practices and/or identification of deficiencies or areas requiring improvement.
  - b. Verification that the ASP are reviewed, at a minimum, on an annual basis in order to ensure that they remain dynamic and viable documents and/or to identify deficiencies or areas requiring improvement.
  - c. Verification that the RTA regularly monitors compliance with the ASP through a continuous and on-going internal safety review process and/or identification of deficiencies or areas requiring improvement.
  - d. Verification that the RTA identifies potentially serious conditions, hazards, threats, and vulnerabilities and ensures that methods to eliminate, control, and mitigate them are implemented.
  - e. Verification that investigations are being conducted following established procedures adopted by the RTA and/or identification of deficiencies or areas requiring improvement.
  - f. Verification that the RTA's emergency preparedness programs are being implemented as specified in the ASP and/or identification of deficiencies or areas requiring improvement.
  - g. Verification that specific activities and tasks identified in the ASP are being carried out as specified in these plans and/or identification of deficiencies or areas requiring improvement.
- 5.3.5.2. After completing the on-site or virtual audit, the TDOT SSO team will prepare a draft report within **60 days** of the audit. The draft report will be delivered to the RTA's safety points-of-contact via email or via secure file sharing and storage system after the conclusion of the on-site or virtual audit.
- 5.3.5.3. The RTA will have **30 days** to respond to the draft report and to prepare preliminary corrective actions as requested by TDOT in the draft report to address any identified findings, recommendations, or concerns.
  - 5.3.5.3.1. If the RTA does not agree with the recommendations or findings, the SSOA and RTA shall meet to resolve differences.
- 5.3.5.4. Upon receiving the RTA's response, TDOT will make any required revisions to the draft and issue the final report within **15 days**.
- 5.3.5.5. The RTA's CAPs to address audit findings will be reviewed, approved, and tracked through to implementation following the process specified in Section 8 of this document.
- 5.3.5.6. TDOT SSO will transmit the completed three-year safety audit report to the FTA as part of its annual submission.

# 5.4. Other TDOT SSO Monitoring Activities

5.4.1. At TDOT's discretion, they may conduct audits, inspections, and special assessments of issues related to system safety at the RTA. TDOT may initiate a special assessment of a



particular subject matter area in response to a given hazard, accident, or incident or trend of such events. These assessments may be announced or unannounced.

5.4.2. At the completion of TDOT's monitoring activities, TDOT may issue a Report or other documents containing findings and recommendations to be evaluated by the RTA for implementation of their Safety Management Process per their ASP. Any CAP developed as a result of this activity is subject to the corrective action plan process described in Section 8 *Corrective Action Plans* of this Program Standard.

5.4.2.1. If the RTA does not agree with the recommendations or findings, the SSOA and RTA shall meet to resolve differences.



# Section 6: Safety Event Definitions and Notification Requirements

49 CFR Part 674.27 (6) - Accident Notification Requirements - The SSO program standard must establish requirements for an RTA to notify the SSO agency of accidents on the RFGPTS. These requirements must address, specifically, the time limits for notification, methods of notification, and the nature of the information the RTA must submit to the SSO agency.

49 CFR Part 674.33 - Notification of Accidents Requirements

- (a) Two-hour notification. In addition to the requirements for accident notification set forth in an SSO program standard, an RTA must notify both the SSOA and the FTA within two hours of any accident occurring on a RFGPTS. The criteria and thresholds for accident notification and reporting are defined in a reporting manual developed for the electronic reporting system specified by FTA as required in § 674.39(b), and in appendix A.
- (b) FRA notification. In any instance in which an RTA must notify the FRA of an accident as defined by 49 CFR Part 225.5 (i.e., shared use of the general railroad system trackage or corridors), the RTA must also notify the SSOA and FTA of the accident within the same time frame as required by the FRA.

# 49 CFR Part 840.3

- (a)(1) The operator of a railroad shall notify the Board by telephoning the National Response Center at telephone 800-424-0201 at the earliest practicable time after the occurrence of any one of the following railroad accidents: (a) No later than 2 hours after an accident which results in: (1) A passenger or employee fatality or serious injury to two or more crewmembers or passengers requiring admission to a hospital; (2)The evacuation of a passenger train; (3) Damage to a tank car or container resulting in release of hazardous materials or involving evacuation of the general public; or (4) A fatality at a grade crossing.
- (b) No later than 4 hours after an accident which does not involve any of the circumstances enumerated in paragraph (a) of this section but which results in: (1) Damage (based on a preliminary gross estimate) of \$150,000 or more for repairs, or the current replacement cost, to railroad and nonrailroad property; or (2) Damage of \$25,000 or more to a passenger train and railroad and nonrailroad property

# 6.1. Purpose

This section defines types of safety events, notifications and methods, and reporting requirements for each type of event.

# 6.2. Event Definitions

- 6.2.1. Types of events
  - a. Accident
  - b. Incident
  - c. Occurrence
- 6.2.2. Accident means an event that involves any of the following:
  - a. Loss of life
  - b. A report of a *serious injury* to a person
  - c. A collision involving a rail transit vehicle (RTV) that results in serious injury, fatality, or *substantial damage*
  - d. A runaway train
  - e. Fire, smoke, or fume conditions that result in an evacuation, serious injury, or fatality



- f. Any derailment of a rail transit vehicle, at any location, at any time, whatever the cause (not inclusive of split or trailed switches, if one or more wheels do not unintentionally leave the rails)
- *6.2.2.1. Serious injuries* are injuries that may or may not require transport from the scene for medical attention that results in any one of the following:
  - a. Requires hospitalization for more than 48 hours, commencing within **7** days from the date of the event
  - b. Results in a fracture of any bone (except simple fractures of fingers, toes, or nose)
  - c. Causes severe hemorrhages, nerve, muscle, or tendon damage
  - d. Involves an internal organ
  - e. Involved second-degree burns affecting more than 5 percent of the body surface

# 6.2.2.2. Substantial damage

- a. Includes damage to transit or non-transit property including vehicles, facilities, equipment, rolling stock, or infrastructure that disrupts the operations of the rail transit agency <u>and</u> adversely affects the structural strength, performance, or operating characteristics of the property, requiring towing, rescue, on-site maintenance, or immediate removal prior to safe operation
- b. Excludes damage such as cracked windows, dented, bent or small punctured holes in the body, broken lights, mirrors, or removal from service for minor repair or maintenance, testing, or video and event recorder download
- 6.2.3. *Incident* means an event with any of the following:
  - a A personal injury that is not a serious injury
  - b One or more injuries requiring medical transportation away from the event
  - c Rail transit vehicle collisions occurring at a grade crossing
  - d Non-collision related damage to equipment, rolling stock, or infrastructure that disrupts the operations of the RTA
  - e Evacuation of a train into the right-of-way (ROW) or onto the adjacent track, including self-evacuations, for reasons other than life safety reasons
  - 6.2.3.1. Grade crossing means an intersection of a roadway and a rail ROW that cross each other at the same level (at grade). For street-running operations, each street intersection is considered a grade crossing (excludes driveways and parking lot entrances). Pedestrian crosswalks in stations are also included.
- 6.2.4. *Occurrence* means an event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a rail transit agency.

# 6.3. Notification Requirements and Methods

6.3.1. Notification of TDOT SSO for serious safety events or hazardous conditions
6.3.1.1. 49 CFR Part 674 only requires notification of events that meet the definition of an accident. The TDOT SSO program, for safety performance evaluation, requires serious safety events or hazardous conditions, as determined by the RTA's ASP, to be a State reportable condition.



- 6.3.1.2. These occurrences are treated either as a State reportable event and/ or are tracked and analyzed via the RTA's SMS, which is reviewed regularly:
  - a. Signal device failures, rail/track buckle, railcar braking failure.
  - b. Near misses with other rail vehicles, employees, automobiles, or pedestrians. This event is a State reportable if deemed a significant hazardous condition.
  - c. Door faults, including wrong-side door openings or door openings during train movement.
  - d. Arcing electrical equipment is a State reportable if the event included a serious injury.
  - e. OSHA-reportable accidents, including a significant hazardous condition, are State reportable events.
- 6.3.1.3. The RTA must report these events of hazardous conditions to the TDOT SSO as soon as practical of serious safety events or hazardous conditions via email or telephone.
- 6.3.2. FTA/TDOT Reportable Events
  - 6.3.2.1. The RTA must notify TDOT according to event thresholds defined in Supplement 1 Rail Transit Accident/Incident Investigation Guide.
    - 6.3.2.1.1. The RTA will provide an initial telephone notification to the TDOT SSO within two (2) hours of a reportable event, leaving a detailed message or text if there is no answer.
    - 6.3.2.1.2. The RTA will follow up with a preliminary report via email within **7** days. The preliminary report must provide as much of the following information as possible:
      - a. Name of the RTA
      - b. Name and job title of person reporting
      - c. Event type (fatality, injuries, property damage, evacuation, derailment, or other)
      - d. Notification times of all applicable agencies
      - e. NTSB, FRA, TSA reportable
      - f. Location, date, and time of event (including grade crossings)
      - g. Initial assessment of the extent of fatalities, injuries
      - h. Preliminary estimate of property damage
      - i. Rail transit vehicle(s) involved (type, number)
      - j. Other vehicle(s) involved (type, number)
      - k. RTA primary person (i.e., Chief Investigator) conducting the investigation (name, title, and contact information)
      - I. Provide brief description of the event generating notification
    - 6.3.2.1.3. Upon receipt of the email notification, TDOT will respond with an email acknowledging receipt. The RTA will provide additional information at TDOT SSO's request.
    - 6.3.2.1.4. The RTA will maintain a current list of contact information for all primary and alternate TDOT SSO contact personnel, including delivery street addresses, email addresses, telephone, and cell phone numbers.
  - 6.3.2.2. The RTA must provide the two-hour initial accident notification to FTA by contacting the U.S. DOT Transportation Operations Center (TOC) by email or phone for events that



meet the accident reporting thresholds specified in Supplement 1 Rail Transit Accident/Incident Investigation Guide.

Table 6.1 U.S. DOT Transportation Operations Center Contact Information

EMAIL: (preferred)	TOC-01@DOT.GOV	TDOT SSO Program Manager MUST be copied on all FTA notifications sent via email.
PHONE:	(202) 366-1863	The date and time of the phone call must be documented

6.3.2.3. FTA Notifications must include a summary of the event and important details such as:

- a Accident date, time, location, and name of the RTA providing the notification
- b When the RTA has more than one rail mode, providing the rail mode and/or line involved in the accident (Heavy Rail/Subway, Light Rail, Streetcar, etc.)
- c Number of fatalities, serious injury, persons requiring immediate medical transport
- d After an RTV related collision, was there substantial damage or towing of RTV or Non-Transit Motor Vehicle (POV)
- e Primary and secondary event types (e.g. collision, derailment, fire, etc.)

# 6.3.3. NTSB

- 6.3.3.1. The RTA will notify the NTSB Response Operations Center at (800) 424-0201 following any one of the following accidents, per 49 CFR Part 840.3:
  - 6.3.3.1.1. No later than 2 hours after an accident which results in:
    - A passenger or employee fatality or serious injury to two or more crewmembers or passengers requiring admission to a hospital.
    - The evacuation of a passenger train; or
    - A fatality at a grade crossing.
  - 6.3.3.1.2. No later than 4 hours after an accident which does not involve any of the circumstances enumerated in paragraph (a) above, but which results in:
    - Damage (based on a preliminary gross estimate) of \$150,000 or more for repairs, or the current replacement cost, to the railroad and nonrailroad property.
    - Damage of \$25,000 or more to a passenger train and railroad and nonrailroad property.

# 6.3.4. FRA

- 6.3.4.1. Each RTA that shares track with a general railroad system and is subject to the FRA notification requirements will notify TDOT SSO within 2 hours of an incident for which the RTA must notify the FRA.
- 6.3.4.2. Whenever the RTA notifies the FRA of events meeting the FRA notification thresholds, the RTA must send TDOT an email notification.



# **Section 7: Accident Investigations**

## 49 CFR Part 674.27(7) - Investigations

(7) The SSO program standard must identify thresholds for accidents that require the RTA to conduct an investigation. Also, the program standard must address how the SSOA will oversee an RTA's internal investigation; the role of the SSOA in supporting any investigation conducted or findings and recommendations made by the NTSB or FTA; and procedures for protecting the confidentiality of the investigation reports.

# 49 CFR Part 674.35 – Investigations

(a)An SSOA must investigate or require an investigation of any accident and is ultimately responsible for the sufficiency and thoroughness of all investigations, whether conducted by the SSOA or RTA. If an SSOA requires an RTA to investigate an accident, the SSOA must conduct an independent review of the RTA's findings of causation. In any instance in which an RTA is conducting its own internal investigation of the accident or incident, the SSOA and the RTA must coordinate their investigations in accordance with the SSO program standard and any agreements in effect.

(b) Within a reasonable time, an SSOA must issue a written report on its investigation of an accident or review of an RTA's accident investigation in accordance with the reporting requirements established by the SSOA. The report must describe the investigation activities; identify the factors that caused or contributed to the accident; and set forth a corrective action plan, as necessary or appropriate. The SSOA must formally adopt the report of an accident and transmit that report to the RTA for review and concurrence. If the RTA does not concur with an SSOA's report, the SSOA may allow the RTA to submit a written dissent from the report, which may be included in the report, at the discretion of the SSOA.(c) All personnel and contractors that conduct investigations on behalf of an SSOA must be trained to perform their functions in accordance with the Public Transportation Safety Certification Training Program. (d) The Administrator may conduct an independent investigation of any accident or an independent review of an SSOA's or an RTA's findings of causation of an accident.

# 7.1. Purpose

This section addresses the requirements for the investigation and reporting of events meeting the thresholds specified in FTA's 49 CFR Part 674.39(b), and in Appendix A to 49 CFR Part 674: Notification and Reporting of Accidents, Incident, and Occurrences.

# 7.2. Investigation of Reportable Events

# 7.2.1.RTA Investigations

7.2.1.1. In most cases, TDOT requires RTAs to investigate their own accidents, and TDOT will conduct an independent review of the RTA's findings of causation. Investigations may also be appropriate for other incidents or occurrences. When conducting an investigation on behalf of TDOT, investigations are performed in accordance with investigation procedures developed by the RTAs and adopted by the TDOT SSO as sufficient. The RTA investigation personnel will have the proper investigation training and expertise outlined in the Public Transportation Certification Training Program and requirements per the RTA's approved Technical Training Plan. The RTAs will maintain investigation procedures that meet or exceed all rules, guidance, or industry standards associated with investigation procedures, including this Standard. Investigation procedures will be reviewed annually by the RTAs against industry standards and updated as appropriate and necessary.

7.2.1.2. During investigations conducted by the RTA, TDOT will provide any technical assistance or guidance requested by the RTAs in support of the investigation.

# 7.2.2. TDOT Investigations

7.2.2.1. TDOT may conduct an independent investigation of any event reported by the RTA. The SSO will inform the RTA of its intention to conduct an investigation or



participate in an RTA investigation of a reported event no later than **7 days** following receipt of the initial event notification.

7.2.2.2. The RTA will be provided with a list of SSO investigation team members. The SSO investigation team will arrive at the RTA's property as soon as practicable. The SSO investigation team will wait until the RTA and/or other emergency response personnel have secured the scene before commencing its investigation. The TDOT SSO reserves the right to request that the RTA preserve the scene to the maximum extent feasible until the arrival and start of the investigation.

7.2.2.3. All SSO investigation personnel will be granted authority to access records, materials, data, analysis, and other information which is pertinent to the investigation. The RTA is expected to provide the SSO investigation team with the resources and information necessary to conduct the investigation in an effective and efficient manner.

# 7.2.3. Joint Investigations

- 7.2.3.1. The SSO may request joint participation in an investigation. In such cases, the RTA will cooperate to the extent practicable in preserving the scene until SSO investigation team members arrive.
  - 7.2.3.1.1.TDOT SSO investigation personnel will have the proper investigation training and expertise outlined in the Public Transportation Certification Training Program or by TDOT's discretion based on experience.
- 7.2.3.2. The SSO investigation team will observe or participate in field analysis, operational surveys, interviews, record checks, data analysis, and other onsite and offsite tasks that may be necessary for a comprehensive investigation.
- 7.2.3.3. The SSO investigation team will observe or participate in assessing physical evidence of the scene and document the environmental and physical factors of the scene through measurements, diagrams, and photographs.
- 7.2.3.4. As part of the investigation, the SSO investigation team will observe or participate in assessing compliance with operating rules and procedures, conducting follow-up interviews (if required), analyzing employee records and the results of post-accident drug and alcohol tests, and conducting vehicle and equipment inspections.
- 7.2.3.5. If the SSO investigation team requires information or analysis which is not readily available or which may require additional resources by the RTA, TDOT will request this information or analysis in a written request to the RTA.
- 7.2.4. National Transportation Safety Board (NTSB) Investigations
  - 7.2.4.1. In any instance in which a safety event is the subject of an investigation by the NTSB, the SSOA will participate in the investigation and will evaluate whether the findings or recommendations by the NTSB require a CAP development by the RTA, and if so, the SSOA will order the RTA to develop and carry out the CAP.

# 7.3. Accident Investigation Reports

7.3.1. TDOT requires a preliminary (see Section 6) and a final report from the RTA for every investigation of a reportable event. In addition, for investigations that take more than **30 days** to complete, TDOT requires monthly status reports. All reports may be transmitted to the TDOT SSO in electronic copy via email or secure file sharing.

### 7.3.1.1. Status Reports

- 7.3.1.1.1. Until the investigation is completed, the RTA will prepare and submit monthly status investigation reports. The status investigation reports, at a minimum, will include the following information as applicable:
  - a. Minutes of any meeting held by an RTA's ad hoc reportable event investigation committee or contractor.
  - b. Disclosure of any immediate actions the RTA has taken or completed.



- c. Principal issues or items currently being evaluated.
- d. Overall progress and status of the investigation.
- e. Projected date of completion.
- 7.3.1.1.2. At its discretion, the RTA may submit a summary report of all ongoing investigation status reports to the TDOT SSO in lieu of several individual status reports.
- 7.3.1.1.3. At any time during an investigation, the RTA must be prepared to provide a full briefing on the known circumstances of the event, the status of the RTA, FTA, FRA or NTSB investigation, and investigation activities.

# 7.3.2. Final Accident Report

- 7.3.2.1. Each RTA investigation conducted on behalf of TDOT must be documented in a draft final report that includes, at a minimum, the following information:
  - a. Executive summary.
  - b. Sequence of events, including a comprehensive description of injuries, fatalities, and property damage with an estimated dollar value.
  - c. Clear description of events before, during, and after the accident/incident.
  - d. Findings and analysis, including investigation activities.
  - e. Description of the investigation process and methodology.
  - f. Description of post-accident/incident testing and research conducted.
  - g. Conclusions, including any findings.
  - h. Probable and contributory causes.
  - i. Recommendations to prevent reoccurrence.
  - j. Supporting analysis to defend any recommendations made.
  - k. Short- and long-term actions.
  - I. Changes to rules, policies, or procedures.
  - m. CAP(s) to address any findings resulting from the investigation.
- 7.3.2.2. Within **30 days** of receiving a report designated as draft final, TDOT will review the report and issue a written reply, either accepting or rejecting the report. If TDOT does not accept the RTA's report, TDOT will communicate in writing the area(s) of disagreement. The report will not be considered final until all exceptions are addressed, and associated CAPs are approved.

# 7.4. Data Reconciliation

- 7.4.1. No less than quarterly, TDOT will compare and reconcile RTA past accident data reported to the National Transit Database (NTD). The SSO will complete the reconciliation using FTA's State Safety Oversight Reporting System (SSOR System). The SSOR System is a web-based data reporting system that is linked to the NTD. Any accidents, as defined by 49 CFR Part 674, reported by the RTA to the NTD are displayed in the SSOR system.
- 7.4.2. The data reconciliation review will ensure the RTA's accident investigation data submitted to both TDOT and the FTA, through the NTD, match and is complete.
  - 7.4.1.1. If data revisions are required, the SSO will contact the RTA and convey which safety event requires revision and why a revision is warranted. The SSO may require a corrective action plan if the safety event reconciliation indicates non-compliance with accident reporting requirements.



## Section 8: Corrective Action Plans

49 CFR Part 674.27(8) - Corrective Action Requirements - The program standard must explain the process and criteria by which the SSO agency may order an RTA to develop and carry out a Corrective Action Plan (CAP), and a procedure for the SSO agency to review and approve a CAP. Also, the program standard must explain the SSO agency's policy and practice for tracking and verifying an RTA's compliance with the CAP, and managing any conflicts between the SSOA and RTA relating either to the development or execution of the CAP or the findings of an investigation.

#### 49 CFR Part 674.37 - Corrective Action Plans

(a) In any instance in which an RTA must develop and carry out a CAP, the SSOA must review and approve the CAP before the RTA carries out the plan; however, an exception may be made for immediate or emergency corrective actions that must be taken to ensure immediate safety, provided that the SSOA has been given timely notification, and the SSOA provides subsequent review and approval. A CAP must describe, specifically, the actions the RTA will take to minimize, control, correct, or eliminate the risks and hazards identified by the CAP, the schedule for taking those actions, and the individuals responsible for taking those actions.

(b) In any instance in which a safety event on the RTA's RFGPTS is the subject of an investigation by the NTSB, the SSOA must evaluate whether the findings or recommendations by the NTSB require a CAP by the RTA, and if so, the SSOA must order the RTA to develop and carry out a CAP.

#### 8.1. Purpose

TDOT's primary concern is the safety of the general public, RTA employees, and contractors. CAPs are an integral part of ensuring safety. TDOT will work with the RTAs to ensure that corrective actions are timely implemented and corrective actions commensurate to the severity of the potential safety-related hazard. This section describes the process for CAP identification, development, submittal, approval, tracking, and closure.

#### 8.2. CAP Identification

- 8.2.1. In any instance where the RTA must develop and carry out a CAP, the SSO will review and approve the CAP before the RTA carries out the plan.
  - 8.2.1.1. An exception may be made for immediate or emergency corrective actions that must be taken to ensure immediate safety, provided that the SSOA has been given notification by email within **5 days**, and TDOT provides subsequent review and approval by email within **7 days**.
  - 8.2.2. CAPs may be identified and developed through several processes and procedures, including accident investigation reports developed by the RTA, SSOA, FTA or NTSB, internal safety reviews conducted by the RTA, three-year audits conducted by the SSOA or FTA, or by the RTA's Safety Risk Management process in their Agency Safety Plan (ASP). CAPs may also be identified by other activities, as well as required by TDOT.
    - 8.2.2.1. If the RTA disagrees with a TDOT finding or other request for a CAP, TDOT may require the RTA to perform a detailed risk analysis. The risk analysis is meant to ensure that the deficiency, if unmitigated, does not present an unnecessary risk to passengers, personnel, or the public. TDOT will review the risk analysis and decide whether to approve it or require additional information. Revisions may be necessary if the analysis does not address the intent of the identified finding or does not follow hazard analysis process requirements. If the risk analysis shows that the deficiency presents an unacceptable level of risk when left unmitigated, TDOT will require the RTA to propose a CAP.



#### 8.3. CAP Development

- 8.3.1.1. A CAP must describe the actions the RTA will take to minimize, control, correct, or eliminate the risks and hazards identified, the schedule for taking those actions, and the individuals responsible for taking those actions.
- 8.3.1.2. Proposed CAPs must include:
  - a) Date of identification.
  - b) Unique identification number for the CAP.
  - c) Source of the hazard or deficiency.
  - d) Identified hazard or deficiency description.
  - e) Hazard or deficiency cause and effect.
  - f) Actions the RTA will take to minimize, control, correct, or eliminate the risks and hazards.
  - g) Initial and mitigated Safety Risk Assessment.
  - h) Issues preventing closure.
  - i) Proposed implementation date for taking those actions.
  - j) Individuals and Departments responsible for taking those actions.

## 8.4. CAP Submittal and Approval

- 8.4.1. The RTA will submit the CAP to TDOT for approval within **45 days** after the need for a CAP is identified. Depending on the issue's complexity requiring corrective action, and at TDOT's discretion, additional time may be granted to prepare the CAP.
- 8.4.2. The CAP may be submitted utilizing the CAP log, RTA Internal CAP form, or any other method described in the RTA's ASP, policies, or procedures.
- 8.4.3. TDOT will notify the RTA of its approval or rejection of a CAP within **15 days** of receiving the CAP. The approval may be on official letterhead or by signing the RTA's internal CAP documentation.
- 8.4.4. When TDOT approves or rejects a CAP, the reasons will be stated in writing. The RTA shall submit a revised CAP to TDOT no later than **15 days** following the CAP rejection unless a previously discussed time frame has been authorized.
  - 8.4.4.1. If the RTA disagrees with the proposed revisions, TDOT and the RTA will meet to resolve differences regarding the CAP.

#### 8.5. CAP Tracking

- 8.5.1. The RTA is responsible for maintaining the CAP tracking matrix, monitoring the implementation status of CAPs, compiling and submitting **monthly status updates** to TDOT, and ensuring assigned personnel adhere to the CAP's process. The RTA must review its process as necessary and apply appropriate updates to ensure compliance with this Standard and with RTA's plans, policies, and procedures.
  - 8.5.1.1. TDOT may request a status report or a meeting regarding CAPs at any time.
- 8.5.2. The RTA is responsible for utilizing and maintaining a CAP tracking matrix or log, which contains all CAPs that must be monitored and approved by TDOT. The CAP tracking matrix or log must include all CAP elements listed in 8.2.4 above, as well as the current status (see 8.5.2.1 CAP status categories) of the CAP and spaces for monthly updates and comments by the RTA and TDOT.
- 8.5.3. CAP status categories:
  - a. <u>Development</u>: The CAP is being developed or CAP is going through internal approval processes.



- b. <u>Emergency Implementation</u>: CAP is emergently being implemented, and the RTA will or has given notification by email within **5 days**. Once TDOT approves, the status will change to In Progress.
- c. <u>Pending TDOT Acceptance</u>: The CAP has been submitted to TDOT and awaiting approval.
- d. <u>In Progress</u>: The CAP has been approved and being implemented.
- e. <u>Pending TDOT Closure</u>: Request has been submitted, with support documentation, for TDOT's approval for closure.
- f. <u>Closed</u>: CAP has been fully implemented, and TDOT has provided a CAP closure letter.
  - i. Other status categories may be utilized if approved by the TDOT SSO.
- 8.5.4. When changes to any CAP parameters are required, the RTA must propose and request an update to these elements. TDOT will review and either approve or request justification/clarification for the proposed revisions.

#### 8.6. CAP Closure

- 8.6.1. Only TDOT has the authority to close a CAP.
- 8.6.2. The RTA may request to close a CAP from TDOT once corrective actions have been fully implemented. TDOT will verify that the CAP has been implemented in compliance with the approved plan.
- 8.6.3. Verification of the satisfactory implementation of a CAP may be by one or more of the following methods, as applicable: records reviews, on-site inspections, unannounced site visits, observations, photographs, review of submitted documents, interviews with staff responsible for implementing the CAP(s), or otherwise determined by TDOT.
- 8.6.4. After the CAP has been verified that the corrective actions have been fully implemented, TDOT will send a CAP closure letter. This letter will include the CAP RTA number, descriptor, and the method utilized for verification.
- 8.6.5. The corrective measure shall be monitored according to the RTA's ASP for SMS when a CAP is closed.



# Section 9: Reporting Requirements

49 CFR Part §674.39 State Safety Oversight Agency annual reporting to FTA

- (a) On or before March 15th of each year, an SSOA must submit the following material to FTA:
  - (1) The SSO program standard adopted in accordance with § 674.27, with an indication of any changes to the SSO program standard during the preceding twelve months;
  - (2) Evidence that each of its employees and contractors has completed the requirements of the Public Transportation Safety Certification Training Program, or, if in progress, the anticipated completion date of the training;
  - (3) A publicly available report that summarizes its oversight activities for the preceding twelve months, describes the causal factors of accidents identified through investigation, and identifies the status of corrective actions, changes to Public Transportation Agency Safety Plans, and the level of effort by the SSOA in carrying out its oversight activities;
  - (4) A summary of the triennial audits completed during the preceding twelve months, and the RTAs' progress in carrying out CAPs arising from triennial audits conducted in accordance with § 674.31;
  - (5) Evidence that the SSOA has reviewed and approved any changes to the Public Transportation Agency Safety Plans during the preceding twelve months; and
  - (6) A certification that the SSOA is in compliance with the requirements of this part.
- (b) These materials must be submitted electronically through a reporting system specified by FTA.

#### 9.1. Purpose

This section addresses the TDOT SSO Program requirements of document submission for both TDOT and the RTAs initially, annually, and periodically.

#### 9.2. TDOT Reporting to FTA

#### 9.2.1. Transfer of Oversight Authority

9.2.1.1. If the State of Tennessee should ever determine that oversight authority should be transferred to another agency of the State, TDOT SSO will work with that agency to ensure that at no point are the RTAs affected by 49 CFR Part 674 left without a duly authorized oversight agency. TDOT will report such change to the FTA.

## 9.2.2. Annual Reporting

By **March 15**<sup>th</sup> of each year, TDOT will submit an Annual Report to the FTA in compliance with 49 CFR Part 674.39. TDOT will submit the annual report data and documentation to FTA using FTA's SSOR System and other instructions provided by the FTA. The following items shall be submitted as part of the Annual Report to the FTA:

- a. Tennessee's SSO Program Standard adopted in accordance with 49 CFR Part 674.27.
- b. Data of Internal SSOA Coordination Frequency, including SSOA Agency Executives and SSOA Program Manager.
- c. Data of Coordination Frequency of the SSO and RTA Personnel meetings, SSO field visits, SSO meetings with the RTA Executive Leader.
- d. TDOT annual spending plan.
- e. Evidence that TDOT employees and contractors have completed the requirements of the Public Transportation Safety Certification Training Program, or, if in progress, the anticipated completion date of the training.



- f. All CAPs developed and their status developed by the RTAs from the preceding year.
- g. Accident and investigation reports from the preceding year.
- h. Level of effort by TDOT and their consultants in carrying out its oversight activities.
- i. If applicable, the Triennial Audits completed during the preceding twelve months.
- j. Evidence that TDOT has reviewed and approved any changes to the ASPs during the preceding twelve months and the RTAs' approved ASPs.
- k. Certification that TDOT complies with the requirements 49 CFR Part 674.
- I. Certification that the RTA is in compliance with its ASP.
- m. Publicly availably annual report summarizing its oversight activities for the preceding twelve months, including a description of the causal factors of investigated accidents, the status of corrective actions, updates and modifications to the ASP of the RTA and the level of effort used by TDOT SSO to carry out its oversight activities.
- n. RTA Annual ISR Reports.
- o. Accident/Incident Investigation Plan of both TDOT and RTAs.
- p. Any additional data, information, or documentation requested by FTA.
- q. Annual status reports of the RTAs submitted to the FTA, Governor, and RTAs.

## 9.3. TDOT Annual Reporting to Other Agencies

By June 15<sup>th</sup> of each calendar year, TDOT will report the status of the safety of each RTA system to the Governor, Chairperson of each RTA Board of Directors, and copy each RTA Accountable Executive Director. The report will summarize the activities of TDOT's SSO Program in addressing State and Federal safety regulations during the previous calendar year. This report is submitted during the FTA annual report the following year and emailed to the TSO Program Manager.

#### 9.4. RTA Reporting to TDOT

- 9.4.1. Annual Submissions from the RTAs are due to TDOT SSO on **February 1**<sup>st</sup> unless otherwise noted:
  - a. Annual Internal Safety Review Report with any findings of noncompliance, including associated corrective actions and an updated three-year review schedule.
  - b. Annually reviewed ASP (Notification must be made to TDOT by **January 1**<sup>st</sup> if the RTA determines an update is not necessary).
  - c. Certification by the RTA's Accountable Executive regarding the agency's compliance with its ASP.
  - d. Annually reviewed Emergency Preparedness Plan (EPP).
  - e. Annually reviewed ISR Program Plan.
  - f. Annually reviewed Accident/Incident Investigation Plan.
  - g. Annually reviewed CAP Plan or Procedure.
  - h. Annually reviewed comprehensive staff training program for the operations personnel directly responsible for the safety of the RTA.
  - i. Emergency Drills, Exercise Plans, and Reports.
  - j. Operations and Maintenance Plans.



- k. Updated Organizational Chart.
- I. Transit Asset Management (TAM) Plan.
- 9.4.1.1. No later than **March 1**<sup>st</sup>, the RTA must make all requested data corrections and submit any requested documentation to TDOT. TDOT SSO will coordinate with RTA staff until all document and data requests are completed so that TDOT may submit the annual report by FTA's March 15th deadline.
- 9.4.2. Other Reporting/ Document Submission
  - a. Monthly CAP logs.
  - b. Data or trend analysis applicable to the RTA SMS or other programs as requested by TDOT SSO.
  - c. Safety and Security Certification Plan, as required per project.
  - d. Safety and Security Certification Verification Report, as required per project.
  - e. Project Management Plan, as required per project.
  - f. Design Criteria and Construction Specification Conformance Checklists, as requested.
  - g. System Integrated Test Plans, as required per project.



# Section 10: Safety and Security Certification

### 10.1. Purpose

The purpose of this section is to describe TDOT SSO's oversight activities of the RTA during the design, construction, testing, and start-up phases for New Starts, Small Starts, or other federally funded grant projects subject to the State safety and security certification program and as determined necessary by the TDOT SSO.

#### 10.2. Notification and Plan Review

- 10.2.1. TDOT SSO requires written notification to the State by the RTA when a rail fixed guideway project has entered the Preliminary Engineering (PE) phase.
- 10.2.2. The RTA will submit a project-specific Safety and Security Certification Plan (SSCP) to TDOT SSO for review and approval.
- 10.2.3. TDOT SSO reviews will address verification of the RTA's compliance with all applicable FTA and TDOT safety and security program requirements for the design, construction, testing, and pre- revenue operations phases of the project. TDOT SSO's reviews will be consistent with 49 CFR Part 633, FTA Circular 5800.1, the FTA Handbook for Transit Safety and Security Certification, and other applicable requirements.
- 10.2.4. In addition to the review activities, TDOT SSO may attend and observe safety and security committee and working group meetings established by the RTA to carry out safety and security certification activities.
- 10.2.5. At any time, TDOT SSO may arrange meetings with the RTA and FTA to resolve its safety and security comments and concerns.

#### 10.3. Performance Standards

- 10.3.1. TDOT SSO requires the adoption of a minimum set of standards necessary to achieve an acceptable level of safety, security, and performance for RFGPTS operating within its jurisdiction.
- 10.3.2. TDOT SSO also requires that the minimum requirements apply to all phases of the rail system life cycle, including design, construction, operation, and maintenance. These requirements, at a minimum, must encompass the following elements:
  - a. Operating Environment
  - b. System Safety
  - c. System Dependability
  - d. Signals/Communications
  - e. Vehicles
  - f. Propulsion and Braking Systems
  - g. Electrical Systems
  - h. Stops/Stations
  - i. Guideways
  - j. System Security
  - k. Emergency Preparedness
  - I. System Integration/Testing
  - m. Operations and Maintenance
  - 10.3.2.1. TDOT SSO requires that the minimum requirements apply to the fixed facilities, vehicles, systems, test requirements, training, operations and maintenance plans, and procedural elements of the RTA be available for review upon request.



### 10.4. Design Criteria Conformance Phase

10.4.1. At the various stages of design development (i.e., 30%, 60%, 90%, 100%), TDOT SSO may review the design documents (contractor design review submittals, drawings, specifications, and calculations). TDOT SSO may review the designs to monitor that the safety and security requirements in the design criteria are included in the design of the various project facilities and systems.

10.4.2. TDOT SSO may review designs that have changes or deviations from the baseline criteria. TDOT SSO's intent is to ensure that the RTA has considered and addressed changes that may impact project safety and security prior to these changes being incorporated into the final design.

### 10.5. Construction Specification Conformance Phase

- 10.5.1. TDOT SSO may conduct field observations, during construction, after work completion, and during testing by the RTA.
- 10.5.2. The purpose of these field observations is to assess the effectiveness of the RTA safety and security certification program. TDOT SSO may provide oversight of the RTA's construction safety and security activities that are being carried out in accordance with its Construction Safety and Security Plan (CSSP).
- 10.5.3. TDOT SSO may prepare reports detailing its observations and open items requiring resolution by the RTA.

#### 10.6. Pre-Revenue Operations and Maintenance Phase

10.6.1. TDOT SSO may review the safety and security-related operations and maintenance plans and documents developed by the RTA for revenue operation in accordance with the TDOT SSO Program Standard, 49 CFR Part 674, and other applicable requirements and guidelines.
10.6.2. TDOT SSO may provide review comments to the RTA on various plans, which may include Standard Operating Procedures (SOP), Emergency Operating Procedures (EOP), Operations and Maintenance Plan, and Right-of-Way Safety Training.

### 10.7. Testing, Start-Up, and Training Phase

10.7.1. TDOT SSO may review plans and documents developed by the RTA for the testing, prerevenue operation, and start-up phases of the project. TDOT SSO may provide review comments
to the RTA for each individual plan and/or document, including Training and Qualification
Program Plans, System Integration Test Plan (SITP) and Procedures, Start-Up and/or PreRevenue Operations Plan, and Emergency Drills and Exercises Plan and Schedule.
10.7.2. TDOT SSO may observe the RTA training and qualification programs. TDOT SSO may
review tabletop exercises and emergency drill plans and procedures developed by the RTA.
TDOT SSO may observe the RTA tabletop exercises and emergency drills. TDOT SSO may provide
review comments to the RTA.

#### 10.8. Project Readiness and Issue Safety and Security Certification

- 10.8.1. At the completion of the safety and security certification process and prior to the start of revenue service (preferably at least **30 days** prior), the RTA is to submit a Safety and Security Certification Verification Report (SSCVR) to TDOT SSO for review and acceptance.
  - 10.8.1.1. The SSCVR summarizes the readiness of the project for revenue service by addressing the following elements:
    - a. Executive Summary regarding Status of SSC and Restrictions
    - b. Description of Activities Performed for SSC
      - i.Design and Construction Checklists



- ii.Integrated Testing
- iii.Emergency Drills
- iv.Contractual Operations and Maintenance Manuals
- v.Fire/Life Safety Training
- vi. Operations and Maintenance Training
- c. Description of Current Certification Status
  - i. Signed Certificates of Conformance for each certifiable element listed within the SSCP
  - ii. Final Project Safety and Security Certificate
- d. Recommendation of Actions Required to Mitigate or Minimize the Consequences of the Remaining Restrictions and Open Items
- e. Schedule for Eliminating Restrictions and Open Items
- 10.8.1.2. TDOT SSO will respond in writing to the SSCVR. In the event TDOT SSO's review determines the SSCVR to be incomplete, TDOT SSO will coordinate with FTA and the RTA to address and resolve the issues and concerns in a timely manner and to avoid impacting the project implementation schedule or other resources.
- 10.8.1.3. The Project Safety and Security Certificate signifies that the project complies with the established Federal, State, and the RTA safety and security criteria and standards. This Certificate may also serve as official notice from the RTA to TDOT SSO that the project has been successfully tested as "safe and secure" and is ready for public use.
- 10.8.2. At the time of passenger revenue service, open items affecting the safety, security, or operations of project may remain on certain facilities, systems, equipment, plans, or procedures.
- 10.8.3. TDOT SSO requires that such open items be listed on a Safety and Security Open Items List or Log for the purpose of on-going tracking and monitoring by TDOT SSO and the RTA.



# Section 11: Transit Asset Management Plan

49 CFR Part 625.1 Purpose. This part carries out the mandate of 49 U.S.C. 5326 for transit asset management. This part establishes a National Transit Asset Management (TAM) System to monitor and manage public transportation capital assets to enhance safety, reduce maintenance costs, increase reliability, and improve performance.

49 CFR Part 625.3 Applicability. This part applies to all recipients and subrecipients of Federal financial assistance under 49 U.S.C. Chapter 53 that own, operate, or manage capital assets used for providing public transportation.

#### 11.1. Purpose

The purpose of this section is to describe the Transit Asset Management System as specified in § 625, the rule that requires RTAs that own, operate, and manage capital assets to develop asset management plans for their public transportation assets, including vehicles, facilities, equipment, and other infrastructure

## 11.2. General Requirements

- 11.2.1. To support the development of the transit asset management system, FTA recommends the RTA to consider the following steps:
  - a. Collect inventory and condition data for rolling stock and infrastructure;
  - Establish life-cycle policy for system preservation, including maintenance, repair, rehabilitation and renewal activities, and modeling the application of the policy on physical assets; and
  - c. Develop alternative capital programing scenarios that use the above steps together with projections of the RTA funding to characterize predicted future conditions and maximize the effectiveness of agency investments.
  - d. Include functionality in the asset management system for storing a complete asset inventory; recording condition and performance data for the inventory; identifying deficiencies in existing assets; providing decision support capability for predicting future conditions and needs; tracking data on work accomplishments, including maintenance actions and capital projects; and supporting monitoring and reporting.
- 11.2.2. As specified in § 625.5, FTA has grouped recipients into two categories.



Table 11.1 Tier Definitions

Tier 1	Applicable Agencies in State of Tennessee
Owns, operates, or manages:	
One hundred and one (101) or more vehicles in revenue service during peak regular service across all fixed route modes	
OR	MATA
One hundred and one (101) or more vehicles in revenue service during peak regular service in any one (1) non-fixed route mode	CARTA
OR	
Rail transit	
Tier 2	
Owns, operates, or manages:	
One hundred (100) or fewer vehicles in revenue service during peak regular service across all non-rail fixed route modes	
OR	
One hundred (100) or fewer vehicles in revenue service during peak regular service in any one (1) non-fixed route mode  OR	N/A
A subrecipient under the 5311 Rural	
Area Formula Program	
OR	
Any American Indian tribe	

<sup>\*</sup> See § 625.25 TAM Plan requirements for tier specific plan requirements and § 625.29 TAM Plan: horizon period, amendments, and updates for plan management requirements.

#### 11.3. Performance Measures

- 11.3.1. The FTA issued a final rule to establish performance measures based on the state of good repair standards established under Section 5326. After the date on which the FTA issued the final rule under MAP-21, Section 5326, and each fiscal year thereafter, the RTA, a recipient of Federal financial assistance under Section 5326, must establish performance targets in relation to the performance measures established by the FTA.
- 11.3.2. Specifically, as required by § 625.43, the RTA must establish performance measures for the following assets:



- 11.3.2.1. *Equipment:* Service vehicles (non-revenue). The performance measure for non-revenue, support-service, and maintenance vehicles equipment is the percentage of those vehicles that have either met or exceeded their ULB.
- 11.3.2.2. *Rolling stock:* The performance measure for rolling stock is the percentage of revenue vehicles within a particular asset class that have either met or exceeded their ULB.
- 11.3.2.3. *Infrastructure:* Rail fixed guideway, track, signals, and systems. The performance measure for rail fixed guideway, track, signals, and systems is the percentage of track segments with performance restrictions.
- 11.3.1.2. *Facilities:* The performance measure for facilities is the percentage of facilities within an asset class, rated below condition 3 on the TERM scale.

## 11.4. Performance Targets

- 11.4.1. As required by § 625.45, the RTA must implement a process to establish performance targets for the assets discussed above according to the follow requirements:
  - a. A provider must set a performance target based on realistic expectations, and both the most recent data available and the financial resources from all sources that the provider reasonably expects will be available during the TAM Plan horizon period.
  - b. A provider must set a timeline for target setting.
  - c. Within three months after the effective date of § 625, a provider must set performance targets for the following fiscal year for each asset class included in its TAM Plan.
  - d. At least once every fiscal year after initial targets are set, a provider must set performance targets for the following fiscal year.
  - e. A provider must ensure that the provider's Accountable Executive approves each annual performance target.
  - f. A Sponsor must set performance targets for group plan participants.
  - g. A Sponsor must set one or more unified performance targets for each asset class reflected in the group TAM in accordance with paragraphs (a)(2) and (b) of § 625.45.
  - h. To the extent practicable, a Sponsor must coordinate its unified performance targets with each participant's Accountable Executive.
  - i. To the maximum extent practicable, a provider and Sponsor must coordinate with the TDOT SSO and the Metropolitan Planning Organizations (MPOs) in the TDOT SSO and MPO performance targets.

#### 11.5. Annual Review

- 11.5.1. Following the initial acceptance of the TAM Plan, the RTA will conduct an annual review of the TAM to ensure that the TAM is current at all times.
  - 11.5.1.1. In the event that the RTA conducts its annual TAM review and determines that an update is not necessary for the year, it must prepare and submit by January 1 formal correspondence notifying the TDOT SSO of this determination. If TDOT SSO wishes to object to this determination, the TDOT SSO will notify the RTA within **30 days**.
  - 11.5.1.2. In the event that the RTA conducts its annual review of the TAM and determines that an update is necessary for the year, the RTA will submit a revised TAM to the TDOT by **February 1**<sup>st</sup>. As appropriate, referenced materials affected by the revision(s) must also be submitted with the TAM.



11.5.2. Each revised TAM submitted to TDOT SSO by the RTA must include a text or tabular summary that identifies and explains proposed changes and includes a time frame for completion of the associated activities.

#### 11.6. Four-Year Update

11.6.1. As specified in § 625.29, the RTA must implement a process to update the entire TAM at least once every four (4) years. The four-year update process will follow the same steps as required for the annual review process. To explain, a provider's TAM update should coincide with the planning cycle for the relevant Transportation Improvement Program or Statewide Transportation Improvement Program. The horizon period of at least four (4) years was established with the intent to link the TAM development process to the traditional Planning process. However, the rule allows grantees to update their TAMs more frequently if the horizon period is four years or more.

11.6.1.1. If the RTA experiences a significant unexpected change that exceeds the agency's established threshold for a simple amendment to the existing TAM Plan, a full TAM Plan update (revision) is required. Within the TAM Plan, RTAs may establish criteria and a standard operating procedure (SOP) for significant change based on their assets and policies, in order to ensure consistency in determining when an update is appropriate. These SOPs could be identified in Agreements with Stakeholders, the Evaluation Plan, and/or Group Plan Sponsor communication.

11.6.1.2. If a TAM Plan is amended, its four-year horizon timeline remains the same. However, if a TAM Plan is formally updated, the update establishes a new four-year horizon timeline and update cycle. Either type of change should be documented in the TAM Plan and provided during Oversight reviews.

### 11.7. Record Keeping

- 11.7.1. As specified in § 625.53, TDOT SSO requires that the RTA perform the following record keeping duties to maintain the TAM Plan:
  - a. At all times, the RTA must maintain records and documents that support, and set forth in full, its TAM Plan.
  - b. The RTA must make its TAM Plan, any supporting records or documents performance targets, investment strategies, and the annual condition assessment report available to TDOT and MPO to aid in the planning process.



# **Definitions and Acronyms**

Note: Each definition that appears within another definition is denoted within a parentheses and italicized.

**Accident** means an *(event)* that involves any of the following: A loss of life; a report of a serious injury to a person; a collision involving a rail transit vehicle; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause. An accident must be reported in accordance with the thresholds for notification and reporting set forth in this Program Standard. Loss of life resulting from illness or other natural causes are not considered reportable accidents.

**Accountable Executive** means a single, identifiable person who has ultimate responsibility for carrying out the safety management system of a public transportation agency; responsibility for carrying out the (*Agency Safety Plan (ASP)*), and (*Transit Asset Management (TAM) Plan*) and subordinate policies and procedures and practices; and control or direction over the human and capital resources needed to develop and maintain both the PTASP and TAM Plan, in accordance with 49 U.S.C. 5329(d) and 49 U.S.C. 5326.

Administrator means the Federal Transit Administrator or the Administrator's designee.

**Agency Safety Plan (ASP)** means the comprehensive agency safety plan for a transit agency, including a Rail Transit Agency, that is required by 49 U.S.C. 5329(d) and based on a Safety Management System. Until one year after the effective date of FTA's PTASP final rule, a System Safety Program Plan (SSPP) developed pursuant to 49 CFR part 659 will serve as the rail transit agency's safety plan.

AIP means Accident/Incident Investigation Plan.

**APTA** means American Public Transportation Association.

**Asset Category** means a grouping of asset classes, including a grouping of equipment, a grouping of rolling stock, a grouping of infrastructure, and a grouping of facilities. See Appendix A of 49 CFR Part 625/630 for examples of asset categories, asset classes, and individual assets.

**Asset Class** means a subgroup of capital assets within an asset category. For example, buses, trolleys, and cutaway vans are all asset classes within the rolling stock asset category. See Appendix A of 49 CFR Part 625/630 for examples of asset categories, asset classes, and individual assets.

**Asset Inventory** means a register of capital assets, and information about those assets.

**Capital Asset** means a unit of rolling stock, a facility, a unit of equipment, or an element of infrastructure used for providing public transportation.

**Chief Safety Officer** means the person to whom the (*Accountable Executive*) has delegated day-to-day responsibility for carrying out the safety management system at the (*RTA*), including the development and implementation of the (*PTASP*), (*TAM Plan*), and subordinate policies and procedures and practices in accordance with 49 U.S.C. 5329 and 49 U.S.C. 5326.

**Collision (non-Rail Grade Crossing)** includes a train to train, train to vehicle, train to object, and train to individual collision that DO NOT OCCUR at a (*Rail Grade Crossing*). Suicides or trespassing-related collisions not occurring at a (*Rail Grade Crossing*) are defined as "Collision (non-Rail Grade Crossing)" with a probable cause of "suicide" or "trespasser" as applicable.



Conflict of Interest generally means a scenario when a person places him/herself in a position where any official act or action taken by them is, may be, or appears to be, influenced by considerations other than the general public interest. All employees and (Contractors) subject to the requirements of the Program Standard occupy a position of public trust and confidence and should avoid not only actual breaches of public trust, but also even the appearance of conflicts of interest. An organizational conflict of interest occurs where a contractor is unable, or potentially unable, to render impartial assistance or advice to the recipient due to activities, relationships, contracts, or circumstances which may impair the contractor's objectivity, or a contractor has an unfair competitive advantage.

**Contractor** means an entity that performs tasks on behalf of (*FTA*), a (*State Safety Oversight Agency*), or an (*RTA*), through contract or other agreement. The (*RTA*) may not be a contractor for the (*State Safety Oversight Agency*).

**Corrective Action Plan (CAP)** means a plan developed by the (RTA) that describes the actions the (RTA) will take to minimize, control, correct, or eliminate risks and hazards, and the schedule for taking those actions. These plans also refer to actions taken to address deficiencies identified through internal and external audit findings or to prevent reoccurrence of the causal factors identified from (event) investigations. Either TDOT or FTA may require a (RTA) to develop and carry out a corrective action plan.

CSSP means Construction Safety and Security Plan.

**Day** means calendar day, unless otherwise specified. When a period of time, such as 30 days, ends on a weekend or holiday, then the next working day is acceptable.

**Derailment** means a non-collision (*Event*) in which one or more wheels of a rail transit vehicle unintentionally leaves the rails.

**Designated Personnel** means (1) Employees identified by a rail public transportation system whose job function requires them to be directly responsible for safety oversight of the public transportation provided by the system; or (2) Employees and contractors of a *(State Safety Oversight Agency)* whose job function requires them to conduct safety audits and safety examinations of the rail public transportation systems subject to the jurisdiction of the *(State Safety Oversight Agency)*. Designated personnel may also be referred to as "covered" personnel.

**Direct Recipient** means an entity that receives Federal financial assistance directly from the Federal Transit Administration.

**Directly Responsible for Safety Oversight** means public transportation agency personnel whose primary job function includes the development, implementation and review of the agency's safety plan, and/or the SSOA requirements for the (*Rail Fixed Guideway Public Transportation System*) pursuant to 49 CFR Part 674.

**Disruption of Operations** means an (Event) that requires the (RTA) to implement a set of control actions (e.g., cancel trips, delay trips, establish bus bridges, reverse move, single track, etc.) that reestablish the continuity in the planned flow of rail transit vehicles and operations and maintenance personnel such that all passengers can reach their intended destinations as soon as possible.

**Eligible State** means a State that has a (*Rail Fixed Guideway Public Transportation System*) within the jurisdiction of the State that is not subject to regulation by the (*Federal Railroad Administration*); or a (*Rail Fixed Guideway Public Transportation System*) in the engineering or construction phase of



development within the jurisdiction of the State that will not be subject to regulation by the (Federal Railroad Administration).

**EPP** means Emergency Preparedness Plan.

**Equipment** means an article of nonexpendable, tangible property having a useful life of at least one year.

**Evacuation due to life safety reasons** means all evacuations of (Rail Transit Controlled Property) for life safety events. A life safety event is one that presents an imminent danger to ALL people in or on (Rail Transit Controlled Property). This includes evacuations of rail transit vehicles and rail transit property, such as stations. The evacuation may be due to the presence of smoke, fuel fumes, suspicious package, bomb threat, etc.

**Evacuation for non-life safety reasons** means evacuations that are not for a life safety reason such as an evacuation of a train into the right-of-way or onto adjacent track; or customer self-evacuation or transfer of passengers to rescue vehicles or alternate means of transportation due to obstructions, loss of power, mechanical breakdown and system failures, or damage.

**Event** means an (Accident), (Incident) or (Occurrence).

**Exclusive-Use Maintenance Facility** means a maintenance facility that is not commercial and either owned by a transit provider or used for servicing their vehicles.

Facility means a building or structure that is used in providing public transportation.

**FAST Act** means Fixing America's Surface Transportation Act.

**FRA** means the Federal Railroad Administration, an agency within the U.S. Department of Transportation.

FTA means the Federal Transit Administration, an agency within the U.S. Department of Transportation.

**Full level of performance** means the objective standard established by *(FTA)* for determining whether a *(Capital Asset)* is in a state of good repair.

**Group TAM Plan** means a single *(TAM)* plan that is developed by a sponsor on behalf of at least one (1) *(Tier II Provider).* 

**Hazard** means any real or potential condition as defined in the (RTA's) hazard management process that can cause injury, illness, or death; damage to, or loss of, the facilities, equipment, rolling stock, or infrastructure of a (Rail Fixed Guideway Public Transportation System); or damage to the environment.

**HMP** means Hazard Management Plan.

**Horizon Period** means the fixed period of time within which an *(RTA)* will evaluate the performance of its *(TAM)* plan.

IAPP means Internal Audit Program Plan.

**Implementation Strategy** means an (RTA's) approach to carrying out (TAM) practices, including establishing a schedule, accountabilities, tasks, dependencies, and roles and responsibilities.

**Incident** means an (*Event*) that involves any of the following: A personal injury that is not a (*Serious Injury*); one or more injuries requiring medical transport; or damage to facilities, equipment, rolling



stock, or infrastructure that disrupts the operations of a (*RTA*). An Incident must be reported to FTA's National Transit Database in accordance with the thresholds for reporting set forth in this (*Program Standard*). If a (*RTA*) or (*TDOT*) later determines that an Incident meets the definition of (*Accident*) as specified in § 674.7, that (*Event*) must be reported to the (*TDOT*) in accordance with the thresholds for notification and reporting set forth in this (*Program Standard*).

**Individual** means a passenger, employee, contractor, rail transit facility worker, pedestrian, trespasser, or any person on the property of a (*Rail Fixed Guideway Public Transportation System*).

**Infrastructure** means the underlying framework or structures that support a public transportation system.

**Initial Submission** means any standard, plan, procedure, or other SSOA-related document to be submitted by a (RTA) to (TDOT) for review and approval that has not been previously reviewed and approved in accordance with the requirements of the (Program Standard).

**Investigation** means the process of determining the causal and contributing factors of an (*Accident*), (*Incident*), or (*Hazard*), for the purpose of preventing recurrence and mitigating (*Risk*).

**Investment Prioritization** means an (RTA's) ranking of capital projects or programs to achieve or maintain a state of good repair. An investment prioritization is based on financial resources from all sources that a (Transit Provider) reasonably anticipates will be available over the (TAM) plan horizon period.

ISAP means Internal Safety Audit Program.

**ISR** means Internal Safety Review.

**Key Asset Management** activities means a list of activities that an *(RTA)* determines are critical to achieving its *(TAM)* goals.

**Life-Cycle Cost** means the cost of managing an asset over its whole life.

MAP-21 means Moving Ahead for Progress in the 21st Century Act.

**National Public Transportation Safety Plan** means the plan to improve the safety of all public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53.

**Near Miss/Face-Up** means an undesired *Event* (as defined in the *(RTA's)* Accident/Incident Investigation Plan) that under slightly different circumstances could have resulted in injuries to people, damage to property or the environment, and/or loss or disruption of service.

**New Start Project** means any rail fixed guideway system funded under FTA's 49 U.S.C. 5309 discretionary construction program.

**NPRM** means Notice of Proposed Rulemaking.

NTD means National Transit Database, a federal reporting system for transit statistics.

NTSB means the National Transportation Safety Board, an independent federal agency.

**OCC** means Operations Control Center.

**Occurrence** means an (*Event*) without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a (*RTA*).



Participant means a (Tier II Provider) that participates in a (Group TAM Plan).

**Passenger** means, for the purposes of *(Event)* reporting, a person who is on board, boarding, or alighting from a rail transit vehicle for the purpose of travel.

**Passenger Operations** means the period of time when any aspect of the *(RTA)* operations is initiated with the intent to carry passengers.

**Patron** means, for the purposes of *(Event)* reporting, an individual waiting for or leaving rail transit at stations, in mezzanines, on stairs, escalators, or elevators, in parking lots, and other transit-controlled property.

**Performance Measure** means an expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets (e.g., a measure for on-time performance is the percent of trains that arrive on time, and a corresponding quantifiable indicator of performance or condition is an arithmetic difference between scheduled and actual arrival time for each train).

**Performance Target** means a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the (FTA).

**Person** means a passenger, employee, contractor, pedestrian, trespasser, or any individual on the property of a (*Rail Fixed Guideway Public Transportation System*).

PMP means Project Management Plan.

**Program Standard** means a written document developed and adopted by the (State Safety Oversight Agency) that describes the policies, objectives, responsibilities, and procedures used to provide (RTA) safety and security oversight.

**Public** means, for the purposes of (*Event*) reporting, all others who come into contact with the rail transit system, including pedestrians, automobile drivers, and trespassers.

**Public Transportation Agency Safety Plan (PTASP)** means the comprehensive agency safety plan for a transit agency, including a Rail Transit Agency, that is required by 49 U.S.C. 5329(d) and based on a Safety Management System. Until one year after the effective date of FTA's PTASP final rule, a System Safety Program Plan (SSPP) developed pursuant to 49 CFR part 659 will serve as the rail transit agency's safety plan.

**Public Transportation Safety Certification Training Program** means either the certification training program for Federal and State employees, or other designated personnel, who conduct safety audits and examinations of public transportation systems, and employees of public transportation agencies directly responsible for safety oversight, established through interim provisions in accordance with 49 U.S.C. 5329(c)(2), or the program authorized by 49 U.S.C. 5329(c)(1).

Rail Fixed Guideway Public Transportation System (RFGPTS) means any fixed guideway system that uses rail, is operated for public transportation, is within the jurisdiction of a State, and is not subject to the jurisdiction of the (Federal Railroad Administration), or any such system in engineering or construction. (Rail Fixed Guideway Public Transportation Systems) include but are not limited to rapid rail, heavy rail, light rail, monorail, trolley, inclined plane, funicular, and automated guideway.

**Rail Grade Crossing** (as defined in the National Transit Database glossary) means an intersection of roadways, railroad tracks, or dedicated transit rail tracks that run across mixed traffic situations with



motor vehicles, streetcar (SC), light rail (LR), commuter rail (CR), heavy rail (HR) or pedestrian traffic; either in mixed traffic or semi-exclusive situations. The boundaries of the intersection will be defined by the municipal, county, or State jurisdiction that owns and controls the roadway.

Rail Grade Crossing Collision includes train to train, train to vehicle, train to object, and train to individual collisions that occur at rail grade crossings. For mixed traffic environments, rail grade crossing collisions are defined ONLY as collisions that occur at street intersections. Suicides or trespassing-related collisions occurring at a (Rail Grade Crossing) are defined as "Rail Grade Crossing Collision" with a probable cause of "suicide" or "trespasser" as applicable. The boundaries of the intersection will be defined by the municipal, county, or State jurisdiction that owns and controls the roadway.

**Rail Transit Agency (RTA)** means any entity that provides services on a *(Rail Fixed Guideway Public Transportation System)*. This includes entities which provide services via a third-party contractor.

Rail Transit Vehicle (RTV) means the (Rail Fixed Guideway Public Transportation Agency's)

**Rail Transit-Controlled Property** means property that is used by the *(RTA)* and may be owned, leased, or maintained by the *(RTA)*.

**Recipient** means an entity that receives Federal financial assistance under 49 U.S.C. Chapter 53, either directly from (FTA) or as a subrecipient.

**Right-of-way (ROW)** means the area through which a rail transit vehicle travels (the vehicle's dynamic envelope).

Risk means the composite of predicted severity and likelihood of the potential effect of a hazard.

**Risk Mitigation** means a method or methods to eliminate or reduce the effects of hazards.

**Rolling Stock** means a revenue vehicle used in providing public transportation, including rolling stock, including, but not limited to, passenger and maintenance vehicles.

**Safety and Security Certification** means the process applied to project development to ensure that all practical steps have been taken to optimize the operational safety and security of the project during engineering, design, construction, and testing before the start of passenger operation.

**Safety** means freedom from harm resulting from unintentional acts or circumstances.

**Safety Risk Management** means a process within a (RTA's) (Public Transportation Agency Safety Plan) for identifying (Hazards) and analyzing, assessing, and mitigating safety (Risk).

**Security and Emergency Preparedness Plan (SEPP)** means a document developed and adopted by the (*RTA*) describing the application of operating, technical, and management techniques and principles to the security aspects of the system throughout its life to reduce threats and vulnerabilities and describing the emergency preparedness policies and procedures for mobilizing the system and other public safety resources to assure rapid, controlled, and predictable responses to various types of transportation and community emergencies.

**Security** means freedom from harm resulting from intentional acts or circumstances.

**Serious Injury** means any injury which:



- (1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date of the injury was received;
- (2) Results in a fracture of any bone (except simple fractures of fingers, toes, or nose);
- (3) Causes severe hemorrhages, nerve, muscle, or tendon damage;
- (4) Involves any internal organ; or
- (5) Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

**Service Vehicle** means a unit of equipment that is used primarily either to support maintenance and repair work for a public transportation system or for delivery of materials, equipment, or tools.

**Small Starts Program** is a (*Federal Transit Administration*) grant program for capital costs associated with new fixed guideway systems, extensions, and bus corridor improvements. Grants must be for under \$75 million in New Starts funds and total project costs must be under \$250 million.

SMS means Safety Management System.

**Split Switch** occurs when a rail transit vehicle is executing a facing-point movement and a wheel flange unintentionally forces the switch point open or out of proper correspondence, and the wheel continues between the back of the switch point and the running rail (also referred to as stock rail).

**Sponsor** means a State, a designated recipient, or a direct recipient that develops a *(Group TAM)* for at least one *(Tier II Provider)*.

**SSCP** means Safety and Security Certification Plan.

**SSCVR** means Safety and Security Certification Verification Report.

**SSMP** means Safety and Security Management Plan.

SSO means State Safety Oversight.

**SSO Program Manager** means the (*State Safety Oversight Agency*) representatives. For (*TDOT*) this position refers to the Program Manager which is assigned to each (*RTA*).

**State** means a state of the United States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the Virgin Islands.

**State of Good Repair (SGR)** means the condition in which a (*Capital Asset*) is able to operate at a full level of performance.

**State Safety Oversight Agency (SSOA)** means an agency established by a State that meets the requirements and performs the functions specified by 49 5329(e) and the regulations set forth in this part.

**Subrecipient** means an entity that receives Federal transit grant funds indirectly through a State or a direct recipient.

**Substantial damage** means any physical damage to transit or non-transit property including vehicles, facilities, equipment, rolling stock, or infrastructure ... which adversely affects the structural strength,



performance, or operating characteristics of the vehicle, facility, equipment, rolling stock, or infrastructure requiring towing, rescue, onsite maintenance, or immediate removal prior to safe operation."

**TDOT** means the Tennessee Department of Transportation.

**Tennessee Code Annotated (TCA)** means a compilation of the laws of the State of Tennessee.

**TERM Scale** means the five (5) category rating system used in the *(FTA's)* Transit Economic Requirements Model (TERM) to describe the condition of an asset: 5.0— Excellent, 4.0—Good; 3.0—Adequate, 2.0—Marginal, and 1.0— Poor.

**Threat** means any real or potential condition that can cause injury or death to passengers or employees, or damage to/loss of transit equipment, property, and/or facilities.

**Tier I Provider** means a recipient that owns, operates, or manages either (1) one hundred and one (101) or more vehicles in revenue service during peak regular service across all fixed route modes or in any one non-fixed route mode, or (2) rail transit.

**Tier II Provider** means a recipient that owns, operates, or manages (1) one hundred (100) or fewer vehicles in revenue service during peak regular service across all non-rail fixed route modes or in any one non-fixed route mode, (2) a subrecipient under the 5311 Rural Area Formula Program, (3) or any American Indian tribe.

**Trailed Switch** occurs when a rail transit vehicle is executing a trailing-point movement and the wheel flange unintentionally forces the switch point against the running rail (also referred to as stock rail) or out of proper correspondence.

**Transit Asset Management (TAM)** means the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit (*Capital Assets*) to manage their performance, risks, and costs over their life cycles, for providing safe, cost-effective, and reliable public transportation.

**Transit Asset Management (TAM) Policy** means a *(Transit Provider's)* documented commitment to achieving and maintaining a state of good repair for all its *(Capital Assets)*. The *(TAM)* policy defines the transit provider's *(TAM)* objectives and defines and assigns roles and responsibilities for meeting those objectives.

**Transit Asset Management (TAM) Strategy** means the approach a *(Transit Provider)* takes to carry out its policy for *(TAM)*, including its objectives and performance targets.

**Transit Asset Management (TAM) System** means a strategic and systematic process of operating, maintaining, and improving public transportation *(Capital Assets)* effectively, throughout the life cycles of those assets.

**Transit Asset Management Plan (TAM Plan)** is a document developed and adopted by the (*RTA*) describing, at a minimum, inventory of (*Capital Assets*) condition assessments of inventoried assets; a decision support tool, and a prioritization of investments. The plan also includes a description of the reporting process for condition of the system, changes in the system, performance measures and targets, and progress for meeting targets.



**Transit Provider** means a recipient or subrecipient of Federal financial assistance under 49 U.S.C. chapter 53 that owns, operates, or manages (*Capital Assets*) used in providing public transportation. For the purposes of this (*Program Standard*), (*Transit Provider*) refers to the (*RTA*).

TTP means Technical Training Plan.

**Useful Life Benchmark** (ULB) means the expected life cycle or the acceptable period of use in service for a *(Capital Asset)*, as determined by a *(Transit Provider (RTA))*, or the default benchmark provided by *(FTA)*.

**Useful Life** means either the expected life cycle of a *(Capital Asset)* or the acceptable period of use in service determined by *(FTA)*.

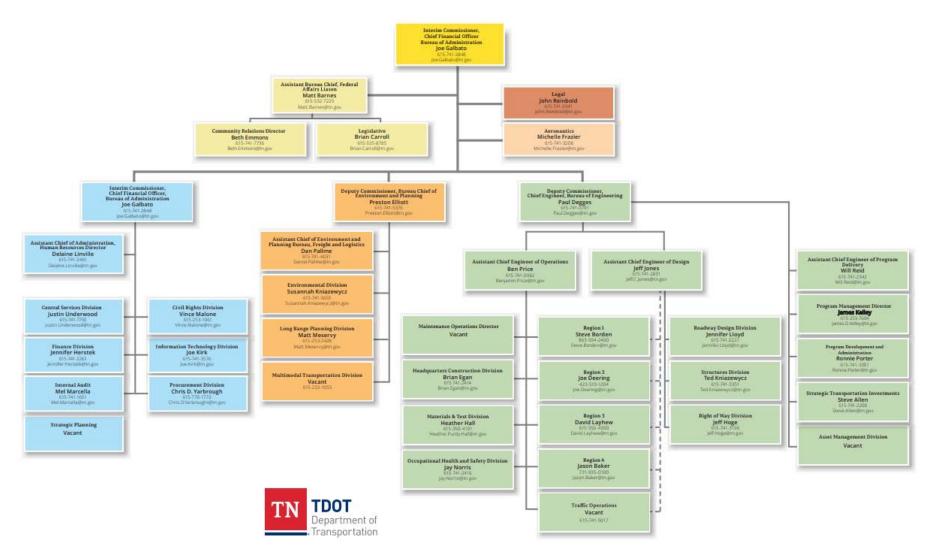
**Vehicle** means any rolling stock used on a rail fixed guideway public transportation system, including but not limited to passenger and maintenance vehicles.

vehicles used for carrying passengers on fare-free services.

**Vulnerability** means a characteristic of passengers, employees, vehicles, and/or facilities that increases the probability of a security breach.

Worker means, for the purposes of (Event) reporting, a (RTA) employee or contractor.

# Appendix A TDOT Organizational Charts

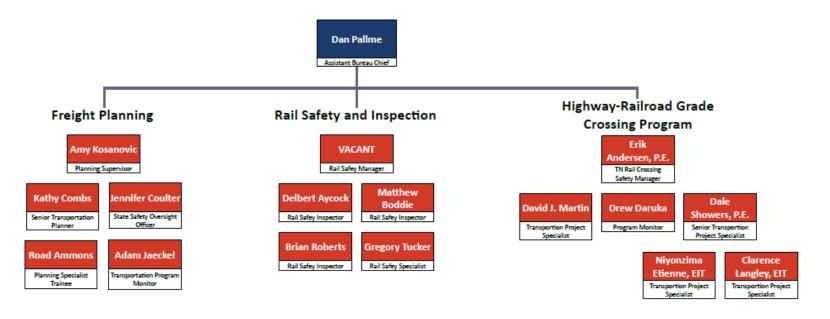


https://www.tn.gov/content/dam/tn/tdot/documents/TDOT\_OrgChart.pdf

Updated: 12/20/2021

# **TDOT Freight and Logistics Division**

# **Organizational Chart**



https://www.tn.gov/tdot/transportation-freight-and-logistics-home/staff.html

Updated: 12/20/2021

# Appendix B TDOT Risk Monitoring Activities

Activity	Output			
	RTA			
	□ Notification			
Notification and investigation of reportable events and	□ Initial accident report			
hazardous conditions	□ Draft final investigation report			
	☐ Approved and adopted draft final report			
	☐ Reviewed and approved CAPs			
	RTA			
	☐ Reviewed and approved checklists and			
Annual internal safety reviews/audits	procedures for internal safety reviews/audits			
	□ Submitted annual report			
	□ Developed and approved CAPs from findings			
	RTA			
	☐ Monthly status report			
Monthly status logs for all open or recently closed CAPs, hazards, and daily safety events	☐ Hazard tracking			
CAPS, Hazards, and daily safety events	☐ Daily safety event tracking			
RTA executive-level and other safety-related meetings	RTA			
(e.g., executive safety committee, configuration	☐ Meeting minutes			
management committee)	□ Handouts			
	SSO			
	□ Agenda			
	□ Handouts			
	☐ Meeting minutes			
On-site or virtual quarterly meetings at rail properties	RTA and SSO			
to review open and recently closed CAPs and safety program topics	☐ Discussion of open and recently closed			
	CAPs			
	□ Review of SSO and NTD			
	reportable events to ensure that the data sets			
	are synchronized			
	SSO			
	□ Inspection schedule			
	□ Written inspection results containing			
Inspections at RTA properties	identified issues or findings			
	RTA			
	☐ As appropriate, developed and approved corrective action plans from inspection finding or tracked in SMS			

# **TDOT Risk Monitoring Activities (Continued)**

	SSO				
	☐ RTA property awareness training				
Technical training plan for SSO staff	☐ On-site activities (e.g., riding the rail system,				
	participating in rail property safety efficiency				
	and enforcement activities)				
	RTA				
SSO review and approval of annual RTA ASP update (completed as part of the rail property annual report)	□ Annual update/internal approval for ASP, including approval from board of directors or equivalent				
	RTA				
	☐ Track minimum standards for safety in rail				
Review and approval of RTA minimum safety	property				
standards	☐ Provide SSO access to minimum standards for				
	safety				
	☐ Update minimum standards for safety based				
	on investigations, audits, industry experience				
	sso				
	□ Checklists				
	□ Draft audit report				
SSO program triennial safety program audit of rail	□ Final audit report				
properties	RTA and SSO				
	☐ CAPs developed by rail				
	properties and approved by SSO				

# Appendix C Program Standard Acknowledgement of Receipt

#### **ACKNOWLEDGEMENT:**

**AUTHORIZED SIGNATURE:** 

The undersigned:

- is the [Accountable Executive or his/her designee] of [Rail Transit Agency];
- has received a copy of the Program Standard of the State of Tennessee;
- has read and understands the requirements contained therein;
- hereby agrees to comply with the Program Standard; and
- understands that the Tennessee Department of Transportation, the State Safety
  Oversight Agency, and the [RFGPTS] are required by law to be legally and financially
  independent of each other and are subject to the requirements specified in:
  - 49 U.S. Code § 5329, Public Transportation Safety Program / Fixing America's Surface Transportation (FAST) Act;
  - o 49 CFR Part 674, State Safety Oversight;
  - o 49 CFR Part 673, Public Transportation Agency Safety Plan;
  - o 49 CFR Part 672, Public Transportation Safety Certification Training Program;
  - o 49 CFR Part 670, National Public Transportation Safety Program;
  - 49 CFR Part 630, National Transit Database;
  - o 49 CFR Part 625, Transit Asset Management

Rail Transit Agency:\_\_\_\_\_

Signature:	Date:
Name / Title:	

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# Appendix D ASP Checklist

Agency:	Reviewer:
Version:	Review Date:

FEDERAL /STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
673.11(a)(1)	(a)(1) The ASP must be signed by the Accountable Executive	a. Is the plan: a. signed and dated by the accountable executive?			
	Equivalent Authority.	b. approved by agency board or equivalent authority?			
673.11 (b)	The ASP must list the mode(s) of transit service covered by the ASP.	Does the plan list each mode covered by ASP?			
	The transit agency must establish the necessary authorities, as they relate to the development and management of the transit agency's Safety Management System (SMS):	Does the plan list a Chief Safety Officer (or SMS Executive) who is:  a. designated by the Accountable Executive?			
673.23(d)(2)	(2) Chief Safety Officer or SMS Executive. The Accountable Executive must designate a Chief Safety Officer or SMS Executive who has the authority and responsibility for day-to-day implementation and operation of an agency's SMS. The	b. has the authority and responsibility for day-to- day implementation and operation of the agency's SMS			
	Chief Safety Officer or SMS Executive must hold a direct line of reporting to the Accountable Executive.	c. list a Chief Safety Officer (or SMS Executive) who is adequately trained?			
673.5	The transit agency must ensure the Chief Safety Officer does not serve in other operational or maintenance capacities.	Does the plan list a Chief Safety Officer (or SMS Executive) who does not serve in other operational or maintenance capacities?			
		Does the plan contain definitions and acronyms consistent with § 673?			
673.5	49 CFR Part 673.5 definitions and acronyms	Definitions used in the ASP and associated documentation must be consistent with § 673 & 674, FTA, and TDOT guidance.			
673.11(a)(5)	Each transit agency must establish a process and timeline for	Does the plan include (TDOT requires the ASP to be reviewed and, if necessary, updated by Jan 1st each year):  a. process for conducting the annual review?			
(SSPS,Sec 4)	conducting an annual review and update of the ASP.	b. timeline for conducting annual review?			
		c. annual review/update completed by Jan 1st?			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
		Is the emergency preparedness and response plan or procedures included within the plan or incorporated by reference?			
		D include in plan, or			
	An RTA must include or incorporate by reference in its ASP	D incorporated by reference.			
673.11(a)(6)	an emergency preparedness and response plan or procedures that addresses, at a minimum, the assignment of employee responsibilities during an emergency; and coordination with Federal, State, regional, and local officials	Does the emergency preparedness and response plan or procedures address the following areas:			
	with roles and responsibilities for emergency preparedness and response in the transit agency's service area.	a. assignment of employee responsibilities during an emergency			
	and response in the transit agency's service area.	b. coordination with local, regional, state, and federal officials with roles/ responsibilities for emergency preparedness and response in the			
		agency's service area?			
	673.11(a)(3) The Public Transportation Agency Safety Plan must include performance targets based on the safety performance measures established under the National Public Transportation Safety Plan.				
673.11(a)(3), Nat 'l Safety Plan	Nat 'I Safety Plan p.32: Reducing the number of fatalities is a top priority for the entire Department of Transportation. As an industry, we must try to understand the factors involved in each fatality in order to prevent further occurrences. Measuring the number of fatalities over vehicle revenue miles, by mode, provides a fatality rate from which to assess future performance.	Does the plan have a safety performance measure based on the total number of reportable fatalities and rate per total vehicle revenue miles, by rail transit mode?			
	673.11(a)(3) The Public Transportation Agency Safety Plan must include performance targets based on the safety performance measures established under the National Public Transportation Safety Plan.				
673.11(a)(3), Nat 'l Safety Plan	Nat 'I Safety Plan p.32: Many transit agencies have never had a fatality, and continued safe operation is exactly what is desired. However, injuries occur much more frequently, and are due to a wide variety of circumstances. Analyzing the factors that relate to injuries is a significant step in developing actions to prevent them. Again, measuring the number of injuries by mode, over vehicle revenue miles provides an injury rate from which to assess future performance.	Does the plan have a safety performance measure based on the total number of reportable injuries and rate per total vehicle revenue miles, by rail transit mode?			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
673.11(a)(3), Nat 'l Safety Plan	673.11(a)(3) The Public Transportation Agency Safety Plan must include performance targets based on the safety performance measures established under the National Public Transportation Safety Plan.  Nat 'I Safety Plan p.32: The safety events measure captures all reported safety events that occur during transit operations and the performance of regular supervisory or maintenance activities. A reduction in safety events will support efforts to reduce fatalities and injuries, as well as damages to transit assets. Measuring the number of safety events by mode over vehicle revenue miles provides a safety event rate from which future performance can be compared.	Does the plan have a safety performance measure based on the total number of reportable events and rate per total vehicle revenue miles, by rail transit mode?			
673.11(a)(3).	673.11(a)(3) The Public Transportation Agency Safety Plan must include performance targets based on the safety performance measures established under the National Public Transportation Safety Plan.  Nat 'I Safety Plan p.33: The system reliability measure expresses the relationship between safety and asset condition. The rate of vehicle failures in service, defined as mean distance between major mechanical failures, is measured as revenue miles operated divided by the number of major mechanical failures. This is a measure of how well a fleet of transit vehicles is maintained and operated. FTA recognizes the diversity of the transit industry, and that agencies have varied equipment types, with varied rates of performance, so this measure allows agencies to develop safety performance targets that are specific to their own fleet type, age, operating characteristics, and mode of operation.	Does the plan have a safety performance measure based on the mean (or average) distance between major mechanical failures, by rail transit mode?			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
673.15(a) 673.15(b)	(a) A State or transit agency must make its safety performance targets available to States and Metropolitan Planning Organizations to aid in the planning process.  (b) To the maximum extent practicable, a State or transit agency must coordinate with States and Metropolitan Planning Organizations in the selection of State and MPO safety performance targets.	Does the plan include process to coordinate with and make safety performance targets available to the State and MPO?  This section must include specific information on the process including who is responsible for making the targets available, to whom the targets are provided to, and when the targets are provided.			
673.21	Each transit agency must establish and implement an SMS under this part. A transit agency SMS must be appropriately scaled to the size, scope, and complexity of the transit agency and include the following elements:  (a) Safety Management Policy as described in §673.23;  Safety Risk Management as described in §673.25;  (c) Safety Assurance as described in §673.27; and  (d) Safety Promotion as described in §673.29.	Does the plan include the establishment and implementation of an SMS?			
673.23(a)	(a) A transit agency must establish its organizational accountabilities and responsibilities and have a written statement of safety management policy that includes the agency's safety objectives and safety performance targets.	Does the plan contain (Sample Safety Management Policy Statement can be found within Appendix B of the National Public Transportation Safety Plan): a. statement of safety management policy? b. including the agency's safety objectives? c. safety performance targets?			
673.23(b)	allows employees to report safety conditions to senior management, protections for employees	Does the plan contain:  a. process that allows employees to report safety conditions to senior management?  b. protections for employees who report safety conditions to senior management?			
		c. description of employee behaviors that may result in disciplinary action?			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
673.23(c)	(c) The safety management policy must be communicated throughout the agency's organization.	Does the plan contain process or description of how the safety management policy is communicated throughout the agency?			
673.23(d)	(d) The transit agency must establish the necessary authorities, accountabilities, and responsibilities for the management of safety amongst the following individuals within its organization, as they relate to the development and management of the transit agency's SMS, including  a. accountable executive b. chief safety officer or SMS executive C. agency leadership or executives d. key staff	Does the plan:  a. Establish the necessary authorities, accountabilities, and responsibilities for the management of safety amongst the following individuals within its organization, as they relate to the development and management of the transit agency's SMS?  b. list the following by position:  @accountable executive,  chief safety officer or SMS executive,  @agency leadership or executives with day- today SMS implementation duties  key staff, groups, or committees with responsibilities in developing, implementing, and operating the agency's SMS.			
674.29(b)	(b)The transit agency must include adequate methods to support the execution of the Public Transportation Agency Safety Plan by all employees, agents, and contractors for the rail fixed guideway public transportation system.	Does the plan include adequate methods to ensure implementation of ASP by all employees, agents, and contractors?			
673.25(a)	(a) Safety Risk Management process. A transit agency must develop and implement a Safety Risk Management process for all elements of its public transportation system. The Safety Risk Management process must be comprised of the following activities: Safety hazard identification, safety risk assessment, and safety risk mitigation.	Does the plan: a. Document a safety risk management process for all elements of its system? Including:  safety hazard identification safety risk assessment safety risk mitigation			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
674.29(b)	(b)The transit agency must include adequate methods to support the execution of the Public Transportation Agency Safety Plan by all employees, agents, and contractors for the rail fixed guideway public transportation system.	Does the plan include adequate methods to ensure implementation of ASP by all employees, agents, and contractors?			
673.25(a)	(a) Safety Risk Management process. A transit agency must develop and implement a Safety Risk Management process for all elements of its public transportation system. The Safety Risk Management process must be comprised of the following activities: Safety hazard identification, safety risk assessment, and safety risk mitigation.	Does the plan:  a. Document a safety risk management process for all elements of its system? Including:  safety hazard identification  safety risk assessment  safety risk mitigation			
	<ul><li>(b) Safety hazard identification.</li><li>(1) A transit agency must establish methods or processes to identify hazards and consequences of the hazards.</li></ul>	Does the plan:  a. document methods or processes to identify hazards and consequences of hazards?			
673.25(b)(1) and (2)	(2) A transit agency must consider, as a source for hazard identification, data and information provided by an oversight authority and the FTA.	b. include as a source for hazard identification, data and information provide an oversight authority and the FTA?			
	(c) Safety Risk Assessment (1) A transit agency must establish methods or processes to assess the safety risks associated with	Does the plan:  a. describe methods or processes to assess safety risks associated with identified safety hazards?			
673.25(c)(1) and (2)	identified safety hazards.  (2) A safety risk assessment includes an assessment of the likelihood and severity of the consequences of the hazards, including existing mitigations, and prioritization of the hazards based on the safety risk	b. does the safety risk assessment include:  ☐ likelihood ☐severity ☐existing mitigations ☐prioritizations of hazards based on safety risk			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
673.25(d)	(d) Safety risk mitigation. A transit agency must establish methods or processes to identify mitigations or strategies necessary as a result of the agency's safety risk assessment to reduce the likelihood and severity of the consequences.	Does the plan:  a. include methods or processes to identify mitigations or strategies necessary as a result of the agency's safety risk assessment?			
673.27(a)	Safety assurance process. A transit agency must develop and implement a safety assurance process that meets the requirements of sections (b)(c) and (d).	Does the plan include:  a. safety assurance process that meets the requirements of sections (b), (c), and (d) listed below?  Safety performance monitoring and measurement  Management of change  Continuous improvement			
673.27(b)	<ul> <li>(b) Safety performance monitoring and measurement. A transit agency must establish activities to:</li> <li>(1) Monitor its system for compliance with, and sufficiency of, the agency's procedures for operations and maintenance;</li> </ul>	Does the plan include activities to:  a. monitor its system for compliance/sufficiency of procedures for operations and maintenance?			
	(2) Monitor its operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended;	b. monitor operations to identify any safety risk mitigations that are ineffective, inappropriate, or not implemented as intended?			
	<ul><li>(3) Conduct investigations of safety events to identify causal factors; and</li><li>(4) Monitor information reported through any internal safety reporting programs.</li></ul>	c. conduct investigations of safety events to identify the causes?			
		d. monitor information through any internal safety reporting programs?			
674.27(a)(6) and 674.33(a)	The transit agency should list the SSOA requirements for notifying the SSOA of accidents including time limits for and methods of notification and what information the RTA must submit to the SSOA.	Does the plan include or reference a process for notifying TDOT SSO of accidents including: " time limits " methods of notification " information the agency must submit to the SSOA			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
674.35(b)	The transit agency should list what must be included in any investigation report developed on behalf of the SSOA, including, at a minimum, identification of factors that caused or contributed to the accident and setting forth a CAP as appropriate.	Does the plan include investigation reporting requirements that include factors that caused or contributed to the accident?			
		Does the plan include investigation reporting requirements that include setting forth a CAP, when appropriate?			
674.35(a)	How the RTA will work with the SSOA when conducting its own internal investigation of a safety event (§ 674.35(a)).	Does the plan include a process for coordinating with TDOT when conducting an investigation of a safety event?			
674.35(c)	Training requirements for all personnel and contractors that conduct investigations on behalf of an SSOA in accordance with the Public Transportation Safety Certification Program (§ 674.35(c)).	Does the plan list training requirements for both staff and contractors who conduct safety event investigations?			
673.27(c)	c) Management of change.  (1) A transit agency must establish a process for identifying and assessing changes that may introduce new hazards or impact the transit agency's safety performance.	Does the plan include:  a. process for identifying and assessing changes that may introduce new hazards or impact the transit agency's safety performance?			
	(2) If a transit agency determines that a change may impact its safety performance, then the transit agency must evaluate the proposed change through its SMS process.	b. process to evaluate changes that may impact safety performance through the safety risk management process?			
673.27(d)(1) and (2), SSPS Section 4	(d) Continuous improvement. (1) A transit agency must establish a process to assess its safety performance.  (2) If a transit agency identifies any deficiencies as part of its safety performance assessment, then the transit agency must develop and carry out, under the direction of the Accountable Executive, a plan to address the identified safety deficiencies.	Does the plan include (Section 4 of the TDOT Program Standard requires RTA's to complete an annual internal safety review):  a. process to assess its safety performance?			
		b. Does the process include a requirement to address deficiencies through the development and carrying out of a plan to address identified deficiencies.			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
673.29(a)	(a) Competencies and training. A transit agency must establish and implement a comprehensive safety training program for all agency employees and contractors directly responsible for safety in the agency's public transportation system. The training program must include refresher training, as necessary.	Does the plan include or reference:  a. a comprehensive safety training program for all employees and contractors directly responsible for safety?			
		b. does the training program include refresher training, as necessary?			
673.29(b)	(b) Safety communication. A transit agency must communicate safety and safety performance information throughout the agency's organization that, at a minimum, conveys information on hazards and safety risks relevant to employees' roles and responsibilities and informs employees of safety actions taken in response to reports submitted through an employee safety reporting program.	communicate safety and safety performance information throughout the agency, which at a minimum:  a. conveys info on hazards and safety risks relevant to employees' roles and responsibilities?			
		b. informs employees of safety actions taken in response to reports submitted through the employee safety reporting program?			
SSPS Sec 10	A description of the safety certification process required by the RTA to ensure that safety concerns and hazards are adequately addressed prior to the initiation of passenger operations and for New Starts and subsequent major projects to extend rehabilitate or modify an existing system, or to replace vehicles and equipment.	Does the plan have a formal program of safety and security certification and hazard and security threat/vulnerabilities management			

FEDERAL/STATE REQUIREMENT	ASP REQUIREMENTS	REVIEW QUESTION:	PAGE#	Compliant (Y/N)	COMMENTS
674.37(a)	(a) In any instance in which an RTA must develop and carry out a CAP, the SSOA must review and approve the CAP before the RTA carries out the plan; however, an exception may be made for immediate or emergency corrective actions that must be taken to ensure immediate safety, provided that the SSOA has been given timely notification, and the SSOA provides subsequent review and approval. A CAP must describe, specifically, the actions the RTA will take to minimize, control, correct, or eliminate the risks and hazards identified by the CAP, the schedule for taking those actions, and the individuals responsible for taking those actions. The RTA must periodically report to the SSOA on its progress in carrying out the CAP. The SSOA may monitor the RTA's progress in carrying out the CAP through unannounced, on-site inspections, or any other means the SSOA deems necessary or appropriate.	Does the plan identify when the agency must develop and carry out a CAP?  Does the plan identify how the agency will submit CAPs to TDOT for review and approval?  Does the plan identify how the agency will manage immediate or emergency corrective actions?  Does the plan identify what the required contents of a CAP, including:  describing the actions they will take to minimize, control, correct, or eliminate the risks and hazards identified by the CAP  the schedule for taking those actions  individuals responsible for taking those actions the process of reporting to TDOT on its progress in carrying out CAPs			
673.31	Safety Plan Documentation. At all times, a transit agency must maintain documents that set forth its Public Transportation Agency Safety Plan, including those related to the implementation of its SMS, and results from SMS processes and activities. A transit agency must maintain documents that are included in whole, or by reference, that describe the programs, policies, and procedures that the agency uses to carry out its ASP. These documents must be made available upon request by the Federal Transit Administration or other Federal entity, or a State Safety Oversight Agency having jurisdiction. A transit agency must maintain these documents for a minimum of three years after they are created.	Does the plan include how the agency will document key processes and procedures required to carry out the SMS that are not included or referenced elsewhere in their ASP?  Does the plan include how the agency will maintain SMS documentation and ensure that all SMS documentation will be maintained for a period of no less than three years after they are created?  Does the plan include how the agency will ensure that FTA, any other Federal entity, and TDOT have access to any SMS documentation maintained by the RTA upon request?			